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**School of Education**

**Social Science and Health**

**PHD Education X3A001**

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**Towards an Effective School Improvement Model for a  
Middle Eastern Context:  
Capacity Building for Sustainable Improvement**

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**Ahmed AlKoofi**

**May 2016**



# **Towards an Effective School Improvement Model for the Middle Eastern Context:**

## **Capacity Building for Sustainable Improvement**

### **Abstract**

*This case-study of school improvement considers the experience of four government schools in the Kingdom of Bahrain, using a variety of evidence to evaluate its effectiveness. Motivated by the need to enhance graduate outcomes, Bahrain's government implemented comprehensive education and labour market reforms to support economic diversification and growth in the face of declining oil reserves. These reforms included the implementation of a school improvement model, supported by Ministry of Education personnel, and the establishment of a new National Qualifications and Quality Assurance Authority (QQA).*

*As a QQA Lead Reviewer prior to joining the School Improvement Project (SIP), the researcher's insider information added an additional level of meaning to the analysis of data collected by different methods and from many sources. Over the duration of the study it became apparent that the school improvement model could be enhanced for a more effective school transformation process. A revised model is presented as a major outcome of this study. Time is needed to effect sustainable change, a finding congruent with international literature. The role of leadership in sustaining change initiatives was confirmed. However, the most significant finding was that effective school improvement needs to put the learner and learning at the centre and involve all stakeholders in planning for school improvement, utilising both a bottom up and top-down approach.*

## **Acknowledgements**

I give thanks to Allah for providing me with the opportunity to grow and develop personally and professionally, as well as to develop a new model for sustainable school improvement that can potentially make a difference for many generations of learners. Praise be to Allah, for the uncountable blessings bestowed upon me and for ensuring that I had both the capability and support to proceed successfully.

Indeed, I would like to acknowledge the many people who have supported me in completing this thesis. Firstly, I would like to express my sincere gratitude to my supervisors, Dr. Julie Rattray and Prof. Robert Coe, for their continuous support, advice and guidance in conducting this research, for sharing their immense knowledge in completing the dissertation, and for their patience and their motivational feedback. Dr. Julie Rattray's professionalism and friendliness have been much appreciated, making my doctoral journey more enjoyable and less stressful. Prof. Robert Coe has provided an excellent peer review and a different perspective that made me think more deeply and widely about the subject.

This research involved conducting surveys, interviews and observations in the field and working with staff in the four schools that formed this case-study. While in the interest of preserving anonymity school staff cannot be individually identified here, I express my sincere gratitude for their contributions to the study and their willingness to openly share their experiences and perspectives with me and those who will read this thesis.

Last, but certainly not the least, I give special thanks to my family: my wife, Um Fatima, for the sleepless nights she spent supporting me to meet the deadlines and, when it all seemed too hard, her unerring confidence in me was what motivated me to carry on. I also

greatly appreciated the spiritual support provided by my parents, my brothers and sisters, my children, and my friends throughout the writing of this thesis and in my life in general.

## **Preface**

I worked as a Lead Reviewer in the National Authority for Qualifications and Quality Assurance of Education & Training (QQA), School Review Unit in 2008. This was the time that the Kingdom of Bahrain (KoB) began its journey of educational reforms. I was amongst the first people selected to work in the School Review Unit to review the government schools' performance and grade their effectiveness. I was very proud of being given that role as, according to my knowledge at that time, the Unit was helping to lift the performance of the education sector within the KoB.

To fill the gaps identified in schools' performance evidenced in the QQA reviews, the Ministry of Education (MoE) created a model called the 'Bahrain Excellence School Model' in 2008. This involved Ministry of Education supporting schools to perform better against the QQA quality standards. The School Improvement Project (SIP) aimed to enhance students' performance and it was anticipated that this would be reflected in improved learning achievements in National Examinations (NE). Despite the efforts of the SIP, from 2011, the NE scores were seen to be deteriorating across all government schools. This situation was perplexing to those working in the SIP, as well as to the schools themselves, and it provided the impetus for the study you are about to read. I had joined the MoE as a Cluster Team member in 2010, facilitating the improvement process across a number of schools. In this role I was privy to many interesting observations and conversations, which allowed me, within the bounds of ethical practice and informed consent, to bring 'tacit' or 'insider' information and insights from my professional experiences into the research. Prompted by that situation, and my direct contact with the SIP creators and implementers, I was interested to research the factors necessary for effective school improvement, with the aim of developing a school capacity model for



sustainable improvement that would gain 'buy in' from schools and lift students' performance.

Once the national initiative was in train it was very difficult to change the SIP, either to make any amendments, or to cease the work even if it was found to be less than effective. Thinking 'outside-the box' I therefore attempted to work differently with schools in an effort to enhance their performance. A review of the literature found there were many school improvement models that utilized the approach that I considered from my experience might work more effectively. The resulting thesis is the product of a study that monitored the implementation of this 'working differently' approach across four Bahrain primary schools. I bring my own experiences as a Cluster Team member, and the experience of the four school participants, into the interpretation and analysis of my experience of the SIP. Whilst the participant-researcher approach is often critiqued by positivists for its lack of objectivity, as analysis and interpretation are coloured by these experiences and those of the research journey, this approach brings with it a greater depth in understanding the meaning of the data generated.

My hope in sharing my own experience as well as the experience of the four schools is to contribute to a greater understanding of the way SIP is implemented with the aim of establishing improved processes that will achieve the positive outcomes that governments, education ministries, schools, teachers and parents seek, and which students deserve.

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## **Abbreviations**

|     |   |
|-----|---|
| KoB | Kingdom of Bahrain                                    |
| MoE | Ministry of Education                                 |
| MoL | Ministry of Labour                                    |
| UoB | University of Bahrain                                 |
| SIP | School Improvement Project                            |
| SIT | School Improvement Team                               |
| EDB | Bahrain Economic Development Board                    |
| ESD | Education Supervision Directorate                     |
| KPI | Key Performance Indicator                             |
| PMS | Performance Management System                         |
| DPS | Directorate of Private Schools & Kindergartens Review |
| DHR | Directorate of Higher Education Reviews               |
| DVR | Directorate of Vocational Reviews                     |
| BTC | Bahrain Teachers College                              |

## **Glossary of Terms**

|     |  |
|-----|--|
| QQA | The National Authority for Qualifications and Quality Assurance of Education and Training. QQA's mandate is to review the quality of the performance of education and training institutions, manage the National Qualifications Framework and oversee the conduct of National Examinations.                      |
| DGS | Directorate of Government School Review is a division of QQA. The DGS is responsible for reviewing, monitoring and reporting on learners' achievement and the quality of provision of education in schools, identifying strengths and areas for improvement.   |
| DNE | The Directorate of National Examinations is division of QQA. The DNE is responsible for undertaking independent National Examinations for grades 3, 6 and 9 (in the core subjects of Mathematics, Science, Arabic, and English) and for Grade 12 (in the core subjects of English, Arabic, and Problem Solving). |
| NPS | The Normalised Percentage Score is a norm-referenced score that compares the performance of students, classes and school, within a year group, i.e. it is a relative measure. The national average is set at 70 percent every year.  |
| PS  | The Performance Score is an absolute measure that is based on an absolute ability scale derived from a Rasch model within item response theory. It is an absolute measurement of students' ability against the skills and topics in the test specifications.   |



|              |   |
|--------------|---|
| SCBSI        | School Capacity Building for Sustainable Improvement is the model the researcher used in the case-study to enhance schools' performance.  |
| SIP          | School Improvement Project is the model the Ministry of Education in the Kingdom of Bahrain used to enhance schools' performance.   |
| Cluster Team | A Cluster Team consists of educational specialists, a social counselor, and a leader. The team's role is to support schools in their improvement journey, buy providing coaching, and support and guidance to the school staff. |
| SIT          | A School Improvement Team consists of the school principal, the assistant principal, senior teachers, the social counsellor, and teachers. The team's role is to lead the improvement in their school.                          |

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# **Chapter One: Introduction**

## **1.1 Rational and Interest**

As a Bahraini with a passion for my country, a father with an interest in safeguarding my children's futures, and an employee with a role in assuring quality in education delivery, it is my dream to make every school in Bahrain a 'good' school. A 'good' school in my book, is a school where kids can enjoy learning, can have fun with their friends and, under the guidance of the staff, prepare to take their place in a society where the pace of technological change makes for an uncertain career pathway. Interest in pursuing this topic arose out of my current role as an educational specialist within the Bahrain Ministry of Education. At a time when 'big questions' were being asked by the public about the quality of education in Bahrain, I was involved in a Ministry School Improvement Project (SIP). My experience led me to believe that we could be doing things better and from this came the idea for this study. The purpose of this study is to understand how to build schools' capacity for sustainable improvement in the Ministry of Education (MoE) in the Kingdom of Bahrain (KoB).

Aiming to enhance learner performance, this study explores some of the many factors that the literature identifies as key to school improvement (management and leadership, the key stakeholders' roles, teachers' professional development, external support and internal improvement teams, and professional learning communities) and their potential effect on student academic achievement.

Bahrain started a programme of Education Reform in June 2005 based on extensive research that included an evaluation of the education system locally and an assessment of the performance level of Bahraini students against internationally recognised

benchmarks, which showed that local students performed well below their peers in tests such as the Trends in International Mathematics and Science Study (TIMSS). This poor showing was of particular concern because of Bahrain's reliance on dwindling oil reserves and the need to diversify the economy, a solution necessitating a supply of local talent. So a major aim of the school improvement initiative was to prepare Bahraini students for the social and economic demands of the future as outlined in Bahrain's *Economic Vision 2030* (Bahrain Economic Development Board, 2014). This bold strategic plan identified the need for radical educational reform to create an effective education system relevant to today's global labour market. Consequently, the Ministry of Education (MoE), the Ministry of Labour, and the University of Bahrain (UoB), with the support of external experts, developed a sector-wide plan to lift the quality and performance of education in Bahrain. The plan involved, amongst other initiatives, the establishment of an independent quality assurance authority to provide independent reviews and reports on the performance of Bahrain's education and training, the introduction of a new teacher training programme and the establishment of a school improvement project.

Bahrain's Education Reform initiatives were initiated in 2008. Since that time National Authority for Qualifications and Quality Assurance of Education and Training's (QQA) reports show that the quality ratings of some schools have been falling and the students' National Examinations (NE) performance scores have deteriorated, reflected also in Bahrain's falling ranking in the TIMSS test results, issues that will be elaborated further in Chapter Two.

Three primary boys' schools and one primary girls' school were selected to explore the effectiveness of School Capacity Building for Sustainable Improvement (SCBSI) on student's achievement in this case-study. The study was restricted to government

schools at primary level because of the ease of access afforded by the researcher's role at that time.

## **1.2 Importance of the Study**

Studies of school improvement, school effectiveness, effective classrooms, leadership capacity building and school capacity building have contributed towards a more integrated understanding of how schools can make a difference in students' learning. Whilst factors such as teachers' high expectations of students can affect achievement, little attention seems to have been paid to the need to build the capacity of schools to implement planned improvement strategies. Further, the literature review (Chapter Three) identifies that little research on improving school effectiveness and building capacity for sustainable improvement has been conducted within the Middle East. This study is important because it seeks to redress the dearth of literature within this region. This case-study of four Bahrain schools goes beyond the usual descriptions of factors that abound in the literature on school improvement, to develop a model for school capacity building that leads to sustainable school improvement.

## **1.3 Research Purpose and Objectives**

The purpose of this study was to investigate the most effective way of developing school capacity and capability for improvement in order to lift students' achievement.

The general objectives of this study were:

1. To critically evaluate the implementation of the SIP in the MoE in the KoB.
2. To develop an effective and sustainable model to foster students' academic achievement and consequently,
3. To recommend an appropriate course of action that will facilitate relevant decisions regarding education and students' academic achievement in the MoE in the KoB.

## **1.4 The Specific Research Questions to be Addressed**

The main question investigated in this study was:

How to make the school improvement initiatives in the MoE in the KoB more successful?

However, in order to answer this question a sub-set of questions was developed to guide the investigation:

- What is needed for school improvement to become sustainable school success?
- How does school capacity building as a process help in building and sustaining school improvement and learner achievement?
- What type of leadership ensures building and sustaining school success?
- What is the effect of school capacity building on students' academic achievement?

## **1.5 Organisation of the Thesis**

The thesis is divided into eight chapters, the first of which (Chapter One) provides an introduction, including my interest in the topic of school improvement, the problem that initiated the study, and the rationale and importance of the study. The overarching research purpose and objectives are outlined, with the specific research questions that guide the study identified here.

Chapter Two provides an overview of Bahrain's educational context, describing the education sector in the Kingdom, historical changes, and the need for the reform initiatives, specifically those pertaining to the MoE and the QQA.

In Chapter Three a review of the literature provides the conceptual underpinning for the school reform initiatives, with a focus on international studies that illustrate the factors that other researchers have found assist in building the capacity of schools for improvement. The first section focuses on the trends in learning and pedagogy, school culture and school reform initiatives, which is followed by a review of literature found to contribute to the understanding of the concepts of school improvement and school effectiveness, school capacity building and sustainable improvement. Highlighted as a key component of the school improvement literature, leadership for sustainable improvement, and specifically the contribution of teachers' leadership is introduced, alongside the associated topics of teachers' professional development and professional learning communities. Finally, Chapter Three identifies the importance of external support and the role that the internal improvement team can have in managing school change.

Chapter Four describes the six elements of the School Capacity Building for Sustainable Improvement (SCBSI) model, linking these with the underpinning literature review.

Discussing firstly the importance of commitment in sustainable school improvement, this Chapter then moves on to cover school diagnosis and coherence, followed by high expectations, as factors essential to the implementation of effective school improvement initiatives. Then deep learning, as a process whereby teachers engage in professional development to enhance their practice, is described, and the link with change reaction through shaping practice made, enabling the identification of the factors that contribute to making a difference, though shared success. Finally, all this is brought together through a discussion of the differences and similarities between the MoE model (SIP) and the researcher model (SCBSI) for school improvement.

The research methodology is outlined in Chapter Five, beginning firstly by describing the paradigm applied and then outlining the research design, selection of research methods and a description of the research tools and data analysis systems utilised in this research. Particular attention is given to the ethical aspects as the researcher was a participant working full-time in the field of school improvement.

The research findings are presented in Chapter Six, which begins with a focus on the four KoB primary schools. Here the findings from each school are separately outlined within their unique context and then summarised and analysed according to the key elements in the SCBSI model. After this, these individual school findings are brought together to identify trends across the four schools in the case-study. From this, the key elements found to be salient in building school capacity emerge. Lastly, an interpretation of the findings follows, comparing the major patterns and themes that are common across the case-study schools.

Chapter Seven discusses similarities and differences in the process of School Capacity Building for Sustainable Improvement, providing further insight into issues concerning

school capacity building in the Bahrain case-study by reference to the literature. The chapter ends with a suggested school capacity building and sustainable the improvement model.

Chapter Eight concludes with a summary of the main findings of the research, providing an account of their significance, some limitations and then highlighting the contribution to new knowledge made by this thesis. Finally, some recommendations for further research to build school capacity for sustainable improvement are identified and the implications of this study for improved practice within both the local and international contexts are outlined.

## **Chapter Two: Bahrain Educational Context**

### **2.1 Education in the Kingdom of Bahrain**

Historically Bahrain has had a reputation for having one of the most advanced education systems in the Gulf and its graduates were held in high regard, but "the realization that revenue from fossil fuel exportation is limited has resulted in a drive for economic diversification that has had major implications for all sectors of the Kingdom's education sector" (Coutts & Leder, 2010, p. 1). Bahrain's *Economic Vision 2030* (Bahrain Economic Development Board, 2014) identified the need for skilled labour to attract foreign investment and new business development, flagging both labour market and education reforms. With the signing of the free trade agreement with United States of America in 2006, Bahrain entered the global trading arena, and consequently the education system was required to ensure that young Bahraini entering the workforce had the skills and knowledge required for the twenty-first century. Schools were facing the challenge of enhancing the quality of their delivery, whilst expanding their provision to deal with increasing numbers of students due to natural population growth as well as immigration. The free trade environment initially allowed for an increasing number of private educational organisations to open in Bahrain, but at that time there was minimal external monitoring to ensure the quality of education delivery. However, all schools are now held accountable in a very public way by newly established quality assurance bodies such as QQA.

Bahrain has been a regional pioneer in education, with a constant drive for further improvements, as *Table 2.1* shows, listing some key milestones in Bahrain's history:



Table 2.1: *Bahrain History*

| <b><i>Year</i></b> | <b><i>Milestone</i></b>                                     |
|--------------------|---|
| <i>1919</i>        | Started male education                                      |
| <i>1928</i>        | Started female education                                    |
| <i>1931</i>        | Oil was discovered  |
| <i>1970s</i>       | Banking sector was established                              |
| <i>2006</i>        | Free Trade Agreement signed with the USA                    |
| <i>2007</i>        | EDB announced the first set of education reform initiatives |
| <i>2009</i>        | School Improvement Project expanded                         |

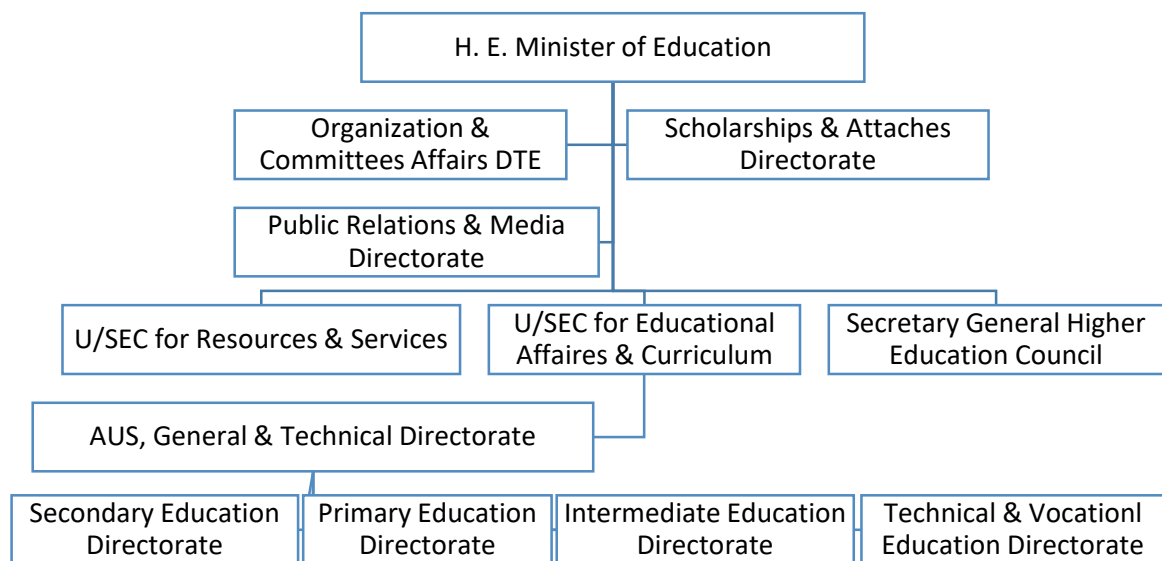
In 1919, after the First World War, Bahrain opened the first government school in the Gulf region, Al-Hidaya Al-Khalifia Boys School in Muharraq. In 1926, a second government school for boys (Al-Hidaya) was opened up in the capital city, Manama. Bahrain was also the first nation in the Gulf to provide education for girls, with Khadija Al Kobra established in Muharraq in 1928. Since then, the Kingdom's education system has continued to grow and flourish. Today Bahrain boasts a comprehensive school system, with an estimated 125,000 students enrolled at primary, intermediate and secondary levels in the more than 200 government schools overseen by the Ministry of Education (MoE) (Economic Development Board, 2008). In addition, there are a further seventy private schools catering for both Bahraini and expatriate children.

Since the turn of the century, schools in Bahrain have faced many challenges associated both with the increasing numbers of school-age children and the diversity of students, as well as a shortage of suitably qualified teachers. The following section, Section 2.1.2, provides a brief overview of the structure and administration of Bahrain's educational system as background to the study.

### 2.1.2 Structure and Administration in Bahrain's Educational System

The MoE is responsible for the administration of government education in Bahrain and it consists of five sectors, with each overseen by an assistant under-secretary, as shown in Figure 2.1.

*Figure 2.1: Ministry of Education Organisation Chart*



*Note: this is not the whole organisation chart*

Private education has its own specialist section, managed through the Directorate of Private Education, which is responsible for licensing and monitoring private schools. The Curriculum Directorate and Educational Supervision Directorate are overseen by the Assistant under Secretary Curriculum and Educational Supervision. Finally the Training and Career Development Directorate is overseen by the Assistant under Secretary Human Resources under the under Secretary for Resources Services (Ministry of Education, 2015).

All government educational facilities and services are financed by the Kingdom, with all the needed resources and services provided to support school operations. The MoE is responsible for recruiting all school staff, for providing professional development, including teacher training, and for placing staff in schools, implementing school improvement initiatives, monitoring school performance, supplying schools with stationary, student books and furniture, as well as maintaining school property and facilities. Government education in Bahrain is free from primary to secondary levels inclusive and this basic education is provided by the Kingdom as a right for every Bahraini citizen.

Since the first school was opened almost a century ago, the number of students attending schools has increased exponentially from one school to more than two hundred schools in 2015. Table 2.2 shows the diversity of students attending has also increased, with today almost equal representation of male and female students. This population increase is reflected in the schooling provision, summarised in Table 2.2, which shows the number of government and private schools by level of education at the time of conducting this study.

Table 2.2: *Number of Students by level of Education and Gender*

| <i>Type of education</i>                          | <i>Gender</i> | <i>Type of School</i>    |                       |               |
|---|---------------|--------------------------|-----------------------|---------------|
|   |               | <b>Government School</b> | <b>Private School</b> | <b>Total</b>  |
| <i>Nursery</i>                                    | Male          |                          | 1003                  | 1003          |
|   | Female        |                          | 922                   | 922           |
|   | <b>Total</b>  |                          | <b>1925</b>           | <b>1925</b>   |
| <i>Total Number of Nurseries 18</i>               |               |                          |                       |               |
| <i>Kindergarten</i>                               | Male          |                          | 16671                 | 16671         |
|   | Female        |                          | 15827                 | 15827         |
|   | <b>Total</b>  |                          | <b>32498</b>          | <b>32498</b>  |
| <i>Total Number of Kindergartens 111</i>          |               |                          |                       |               |
| <i>Primary Level</i>                              | Male          | 33077                    | 19369                 | 52446         |
|   | Female        | 33961                    | 16541                 | 50502         |
|   | <b>Total</b>  | <b>67038</b>             | <b>35910</b>          | <b>102948</b> |
| <i>Intermediate Level</i>                         | Male          | 16521                    | 6793                  | 23314         |
|   | Female        | 16243                    | 5678                  | 21921         |
|   | <b>Total</b>  | <b>32764</b>             | <b>12471</b>          | <b>45235</b>  |
| <i>Secondary Level General</i>                    | Male          | 9398                     | 5069                  | 14467         |
|   | Female        | 15332                    | 4170                  | 19502         |
|   | <b>Total</b>  | <b>24730</b>             | <b>9239</b>           | <b>33969</b>  |
| <i>Secondary Level Technical &amp; Vocational</i> | Male          | 6273                     |                       | 6273          |
|   | Female        | 819                      |                       | 819           |
|   | <b>Total</b>  | <b>7092</b>              |                       | <b>7092</b>   |
| <i>Total Number of Private Schools 73</i>         |               |                          |                       |               |
| <i>Total Number of Government Schools 207</i>     |               |                          |                       |               |

(Ministry of Education Bahrain, 2014).

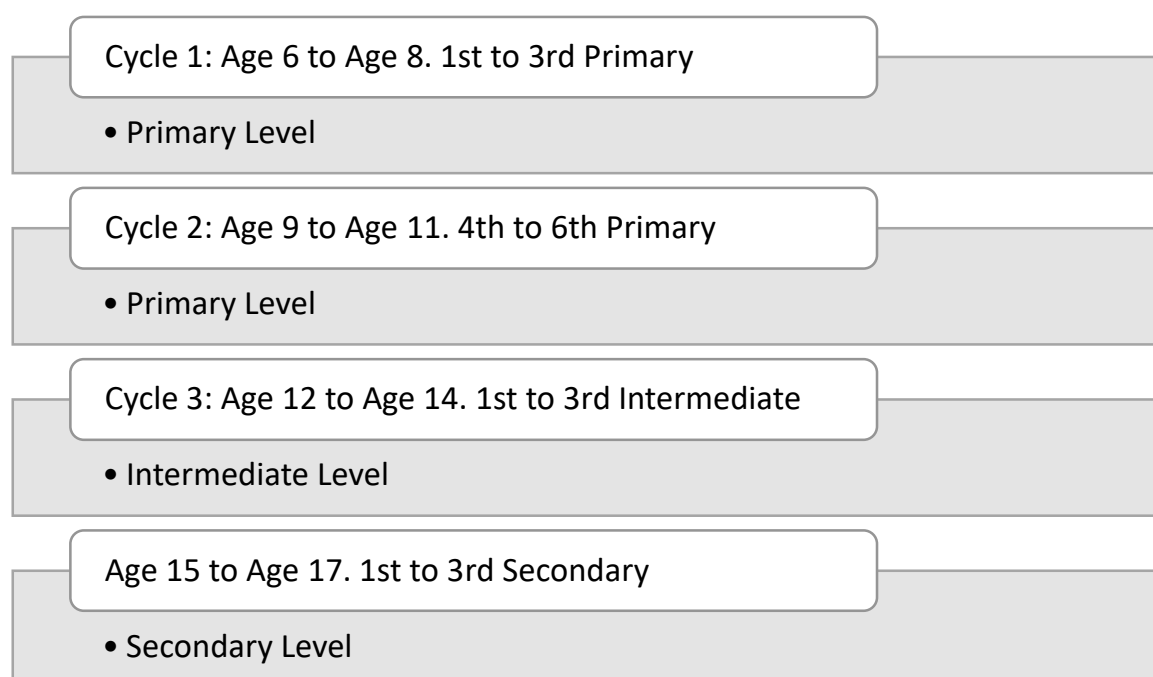
Education in the KoB is single sex in all government schools, and at all levels. Almost half of the schools are designated as male only schools, including more than 100 primary schools. However, half of the primary males' schools are taught by female staff.

**Appendix 2.1** shows the number of schools in Bahrain by gender.

### *Compulsory Education Requirements*

The education system in the KoB follows a ladder of nine years of education from primary up to secondary education, as shown in Figure 2.2

*Figure 2.2: KoB Education Ladder*



Education in the KoB is compulsory for children aged between six and fourteen.

Children must be enrolled either in the government schools or the private ones.

As is shown in Figure 2.2, primary education is the first formal rung of the school ladder in the KoB and it accommodates students aged between six and eleven. Primary education lasts for six years and is divided into two cycles. The first cycle incorporates the first primary up to the third primary, and at this stage the 'class-teacher' system is applied, with a home-room teacher who teaches almost all the subjects except English language, design and technology, music education, and physical education. The second cycle incorporates the fourth primary up to the sixth primary, and here the 'subject-teacher' system is applied, where each subject is taught by a teacher who is specialised in a specific discipline. The subject-teacher model is also applied over the third cycle, known as the intermediate stage, which accommodates students between the ages of 12-14 years, and lasts for three years. The first three cycles of education are considered as 'basic education', while the secondary stage is considered to be supplementary to this basic education. Secondary education accommodates students aged between 15–17 years. The duration of study in the Secondary stage is three years, divided across six semesters (Ministry of Foreign Affairs, 2015). Table 2.2 shows the number of students by level of education and gender for the academic year 2013/2014.

### *Curriculum*

The MoE designs the curriculum and supports schools to deliver it. It also provides student textbooks, teacher guides, and other teaching resources. The MoE guides schools in the implementation of the approved syllabus for each level, as well as in the application of appropriate teaching and learning strategies.

## **2.2 Reforming the Education System**

### **2.2.1 Why Was Change Needed?**

In the twenty first century education plays an increasingly important role in both preparing students to enter the workforce and providing ongoing opportunities for upskilling over their career path. According to the Higher Education Council, "the vital role of education is reinforced by the rapid pace of technological change, as well as global economic forces. Within this context, the education and workforce development systems are critical for supporting human capital development throughout the life course and to helping Bahrain achieve its vision for 2030" (2012, p. 1). Faced with depleting oil resources and an increasingly competitive trading environment, the Kingdom of Bahrain's national strategy, *Economic Vision 2030*, provides a roadmap to sustainability through growth and diversification of the economy. It created demand for a more highly skilled labour force, identifying the need for educational reform to create "an effective education system, relevant to today's global labour market" (Soman, 2008, para. 4), as there were gaps between what the education system was providing and the skills required by employers. The mismatch between the job market and graduate capability led to high youth unemployment. However, as Al Daylami et al., (2015) explain, this problem is not unique to Bahrain, with the World Bank reporting that youth unemployment is a problem across the whole Middle East and North African region (The World Bank, 2013). As a consequence, Al Daylami et al., explain, Bahrain instigated a comprehensive series of national education reform initiatives across all sectors of education and at all levels: schools, vocational education and teacher training, aiming to ensure standards and build-in a vocational focus to the learning process that would make Bahrainis the employees of first choice (ibid.).

### **2.2.2 How Was it Done?**

In June 2005 Bahrain's Economic Development Board (EDB) initiated a study into the condition of the education system and the performance of students in the Kingdom. The study benchmarked Bahrain's education system and outcomes against international best practice in more than 20 countries and it reviewed ways in which other countries approached educational improvement (Economic Development Board, 2008).

A team from the MoE, the Ministry of Labour, the University of Bahrain, the Bahrain Chamber of Commerce and Industry, the Supreme Council for Women, the EDB, and other stakeholders were brought together to develop a reform plan for Bahrain's education system. They were asked to study the most successful reforms undertaken around the world, and use what they learned to develop a bold and comprehensive reform plan for the Kingdom. The team used a number of sources in the study including academic research on educational best practice, and benchmarking trips to five countries including Singapore, New Zealand, Ireland, Finland, and Switzerland. The team also conducted meetings with local and international experts, workshops with 1500 key stakeholders in Bahrain, and it reviewed recommendations from international experts. This 'Diagnostic' revealed that graduates from Bahrain's education system perform below their international peers and fail to meet the expectations of the private sector (Economic Development Board, 2008).



### 2.2.3 Findings and Opportunities

The findings from this 'Diagnostic study' showed that students in Bahrain's education system were, in general, performing below international benchmarks and they were not meeting the expectations of the private sector (Economic Development Board, 2008).

The diagnostic revealed multiple opportunities to improve output from the education system:

*School:*

- Achievement levels in core subjects (Arabic, English, Mathematics and Science) needed to be improved across all levels of the system.
- There was a substantial gender gap, with girls outperforming boys at all levels
- There were two main reasons identified for low student achievement:
  - The quality of teaching in schools, with particular emphasis on the need to improve the training of teachers and other school staff.
  - The curriculum focus on knowledge acquisition rather than skills development.

*Student Outcomes in Bahrain's Schools:*

In 2003, Bahrain participated for the first time in the Trends in International Mathematics and Science Study (TIMSS). While the results contained some cause for optimism as, Bahrain was one of the top performers in the Middle East, Bahraini students performed poorly relative to their international peers. Bahrain was significantly below the international average in both subjects, and ranked 37<sup>th</sup> out of 45 countries in Mathematics, and 33<sup>rd</sup> in Science. Bahrain's students showed weak performances in core subjects compared to the international average. **Appendix 2.2**

shows the Bahraini students' scores in TIMSS in 2003 and **Appendix 2.3** shows the eighth grade Bahraini students' scores in TIMSS in 2007.

*Performance Management:*

The quality of teachers explains much of the success of top-performing education systems, but similarly teaching quality may also be a factor in the poor performance of Bahrain's schools. However, also important in Bahrain as a factor in school performance was the way in which the education system was managed, and whether or not the management system promoted improvement in the quality of teaching.

In order for an education system to perform better, several criteria have to be met according to the MoE:

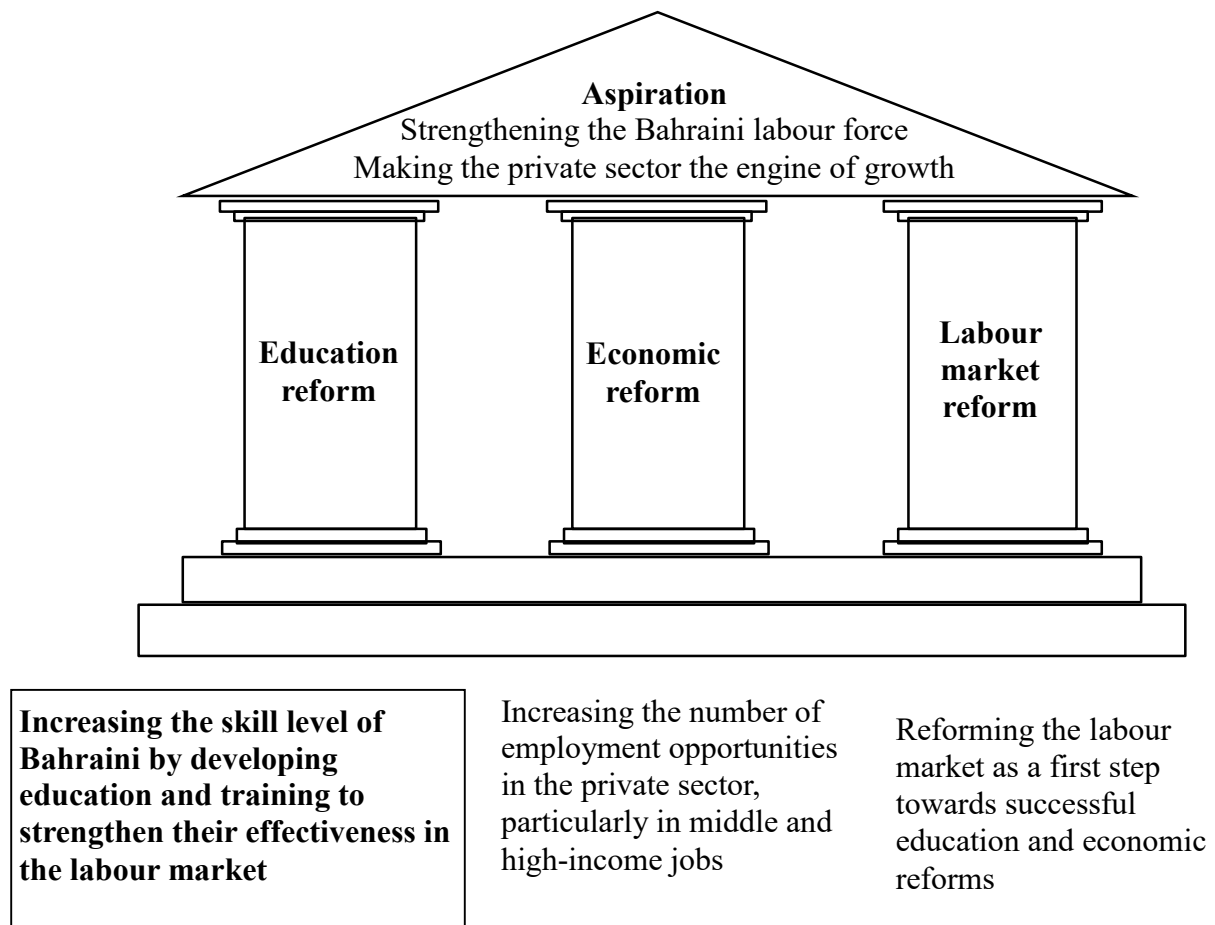
- Students, teachers and school principals need to have a clear picture of what good performance looks like
- Students, teachers, and school principals need to understand how they stand relative to that benchmark of good performance; and
- Students, teachers, and school principals need to be incentivised to improve (Ministry of Education Bahrain, 2010a).

Bahrain's Vision 2030 requires an education system that is amongst the best in the world. Evidence from the MoE, international studies, and surveys of the private sector suggested that much work needed to be done in Bahrain in order to create a world-class education system, and hence the reform initiatives outlined in Section 2.2.4.

## 2.2.4 Reform Initiatives

Bahrain's 2030 *Economic Vision* for sustainability was based on a strategy to develop a range of sectors and reduce dependency on oil, and it was unique in that it flagged the need for both labour market as well as educational reforms. To achieve economic diversification and growth, Bahrain's Reform Programme tackled three areas: education reform, economic reform and labour market reform, as shown in Figure 2.3. Education was seen, however, as the key pillar underpinning Bahrain's reform programme.

Figure 2.3: Bahrain Reform Programme



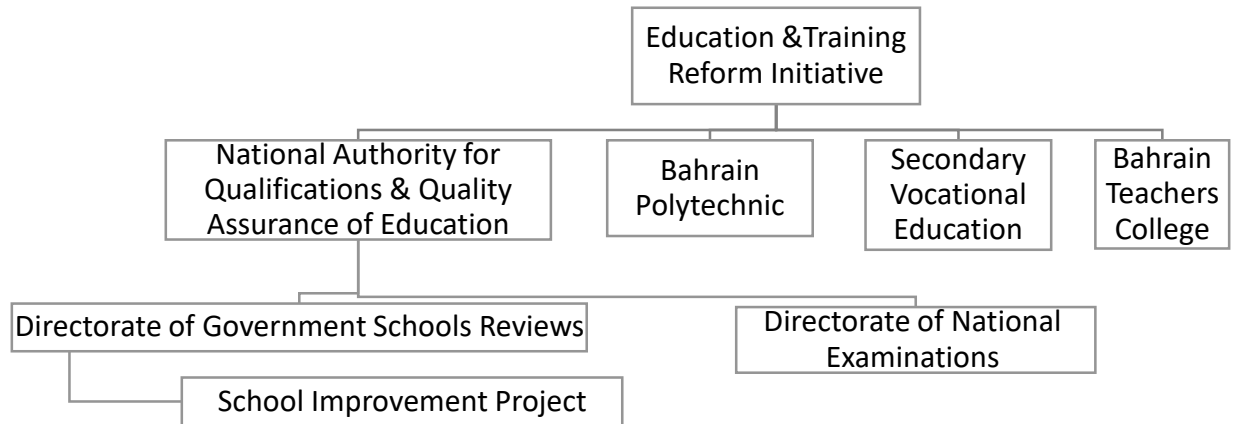
In September 2006 a strategic plan for reform was developed through collaborative work between the government and private sectors with the support of external experts, as it was recognised that the key stakeholders involvement in education reform is vital (Mertkan-Ozunlu & Thomson, 2009). The target of the education reform was to lift the quality and performance of education in Bahrain (Economic Development Board, 2008).

A year later, in June 2007, EDB announced the first set of education reform initiatives, which included:

- Creating an independent quality assurance authority.
- Strengthening the teaching profession, through improved recruitment, training and employment conditions.
- Creating a polytechnic.
- Improving secondary vocational education.

Figure 2.4 shows the functional relationship of education reform initiatives in the KoB.

Figure 2.4: Bahrain Education Reform



## 2.3 Quality Assurance Authority (QQA)

The Bahrain quality assurance authority is an independent quality assurance agency created to cover all education levels. QQA's role is to ensure that the quality of education and training in Bahrain meets international standards and best practice. QQA functions include:

- Reviewing schools and training institutes and examining students
- Identifying improvement areas in Bahrain's education system
- Driving improvements in the quality of education by increasing accountability and transparency
- Writing reports on the overall quality of the education system and spreading best practices

The reason for creating QQA was that there were quality issues particularly with the private sector that were causing reputation risk to the Kingdom (Coutts & Leder, 2010).

Similar institutions exist in top performing education systems like New Zealand, UK, Ireland and Hong Kong, but there was no independent quality assurance agency in Bahrain to deal with these issues.

## **2.4 Bahrain Teachers' College**

A need to strengthen the teaching profession underpinned reforms in teacher training that included the establishment of a new Bahrain Teachers College (BTC), developed with the technical support of Singapore's education authorities (Trade Arabia News Service, 2008). The aim of the BTC was to "revolutionise teaching methods in schools" by recruiting "the brightest Bahraini school and university graduates to train them as a new generation of teachers" according to the press release issued when Education Minister Dr. Majid al Nuaimi signed the contract for the BTC reform project with Singapore's National Institute of Education Director, Prof Lee Sing Kong in 2008 (Trade Arabia News Service, 2008) in the presence of the Deputy Prime Minister and Education and Training Reform Committee Chairman, Shaikh Mohammed bin Mubarak Al Khalifa at the Gudaibiya Palace. The Crown Prince and Economic Development Board (EDB) Chairman, Shaikh Salman bin Hamad Al Khalifa, opened the BTC at Bahrain University's Sakhir campus in November of that same year with an intake of 200 teacher trainees.

Prior to 2008, when the BTC project began, teachers studied a Bachelor of Arts at the University of Bahrain, majoring in a specific subject and taking a minor in Education. In this programme of teacher education there was a heavy reliance on theory and only one subject where teacher trainees applied what they had learned at university into

practice in schools for one term. However, the new qualification offered by BTC is 'hands on' throughout.

## **2.5 Reform Initiatives in the MoE**

A major tenet of education reform in schools was the School Improvement Project (SIP), designed to enhance the performance of government schools and to improve future career outcomes for students. The need for the SIP arose from Bahrain's *Economic Vision 2030* and from the findings from the first batch of QQA review reports. The SIP involved significant change in schools, the MoE, and the relationship between the schools and the MoE (Economic Development Board, 2008). It was implemented by applying two complementary approaches.

The first approach involved the development of a 'Model of Excellence School', (see Figure 2.5). With its clearly articulated vision and strategies for best practice, this model provided a benchmark and a guide to government schools in order to establish an environment more conducive to learning and better academic achievements for students.

The second approach was to improve the managerial practices within the Ministry itself. This initiative aimed to build capacity and capability through providing more support for schools to achieve excellence in accordance with the desired objective, as shown in Figure 2.6 (Ministry of Education Bahrain, 2009).

The SIP included improvement programmes involving various aspects of the workings of the school, as described below:

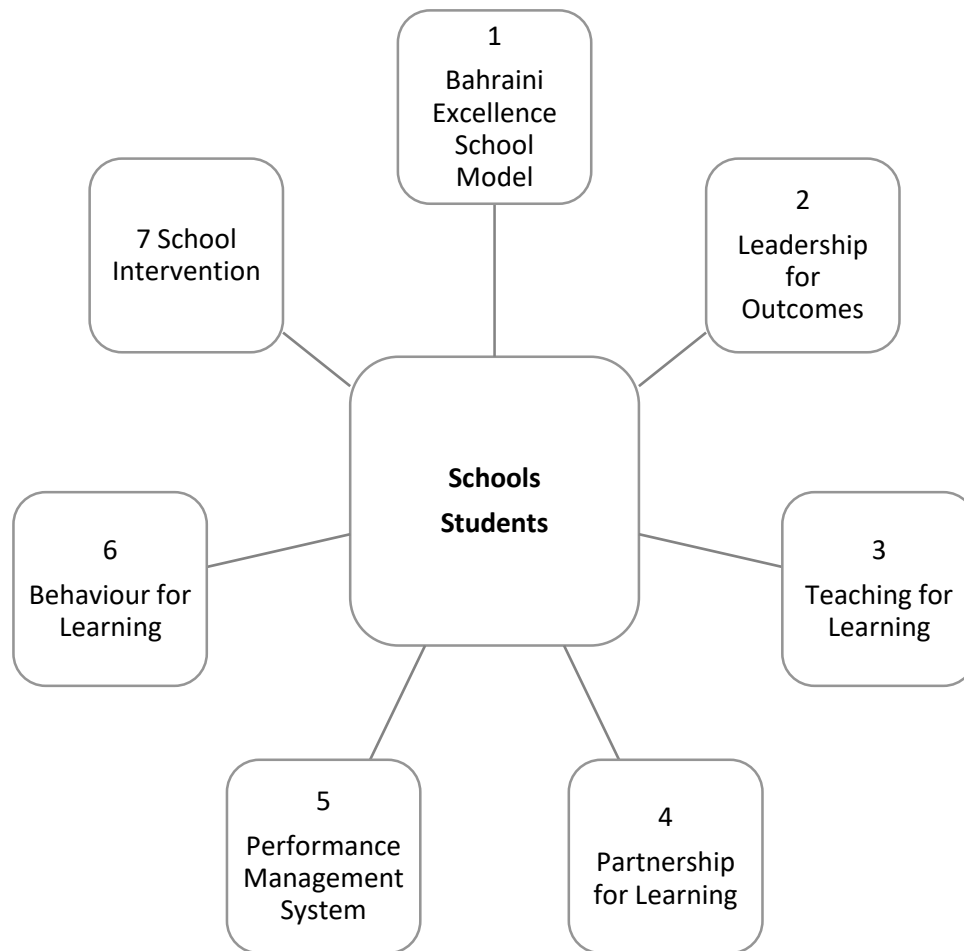
- The *Bahraini Excellence School Model* was a self-evaluation tool designed for schools to assess their practices and rate their performance against the Bahraini Excellence School Model criteria, which includes 156 criteria. Then schools were required to use the evaluation findings to rate their overall performance and plan for improvement. The Model was divided into eight domains matching the eight domains used by the QQA.
- *Leadership for Outcomes* was a project focused on the areas of planning and budget (strategic planning). The key aim was to support school leaders in order to improve student and staff performance through both instructional leadership and administrative leadership (Economic Development Board, 2008). Each school was required to prepare a strategic plan, including the school's vision and mission, and its strategic goals over four years, including how any recommendations identified in the QQA reports would be addressed, together with an action plan and budget.
- *Teaching for Learning* was a project designed to enhance the students' ability to learn throughout life. It aimed to enhance teachers' practices to deliver good teaching with the support and guidance from the MoE to enhance student's outcomes (Economic Development Board, 2008). It was thought that teaching effectiveness would be improved by using effective teaching and learning methods and providing professional development sessions for teachers to improve their classroom practices. This change was supported by the Education Supervision Directorate (ESD), which provided training and guidance to teachers in the field of work and made sure that teachers were delivering the curricula up to the required standards.



- *Partnership for Learning* was a project that focused on utilizing 12 Key Performance Indicators (KPIs) as a tool to improve performance in targeted areas. Schools developed a scorecard, and then collected the data to fill the 'data collection' tool. Once all the data were collected, the school analysed the data using a 'data analysis' tool, which was also provided by the MoE. These analyses led finally to the development of a series of actions related to each KPI in order to achieve it. The KPIs were then monitored to assess progress by the school and the Cluster Team. Monitoring was regularly conducted at different times over the academic school year (Ministry of Education Bahrain, 2010b).
- *Performance Management System (PMS)* was a project designed to evaluate the performance of all education staff within the school and this was linked the MoE Teachers' Promotion System. The academic, management and leadership staff completed the PMS form, which consisted of an evaluation form of teachers' performance against standard criteria, and this resulted in a professional development plan congruent with the school strategic plan.
- *Behaviour for Learning* was a project to enhance students' behaviour.
- *School Intervention* was a project put in place to improve the performance of schools that received inadequate grades in the QQA's reviews. These failing schools were intensively supported by a team from the MoE.

Figure 2.5 summarises all these elements of the SIP overseen by the MoE.

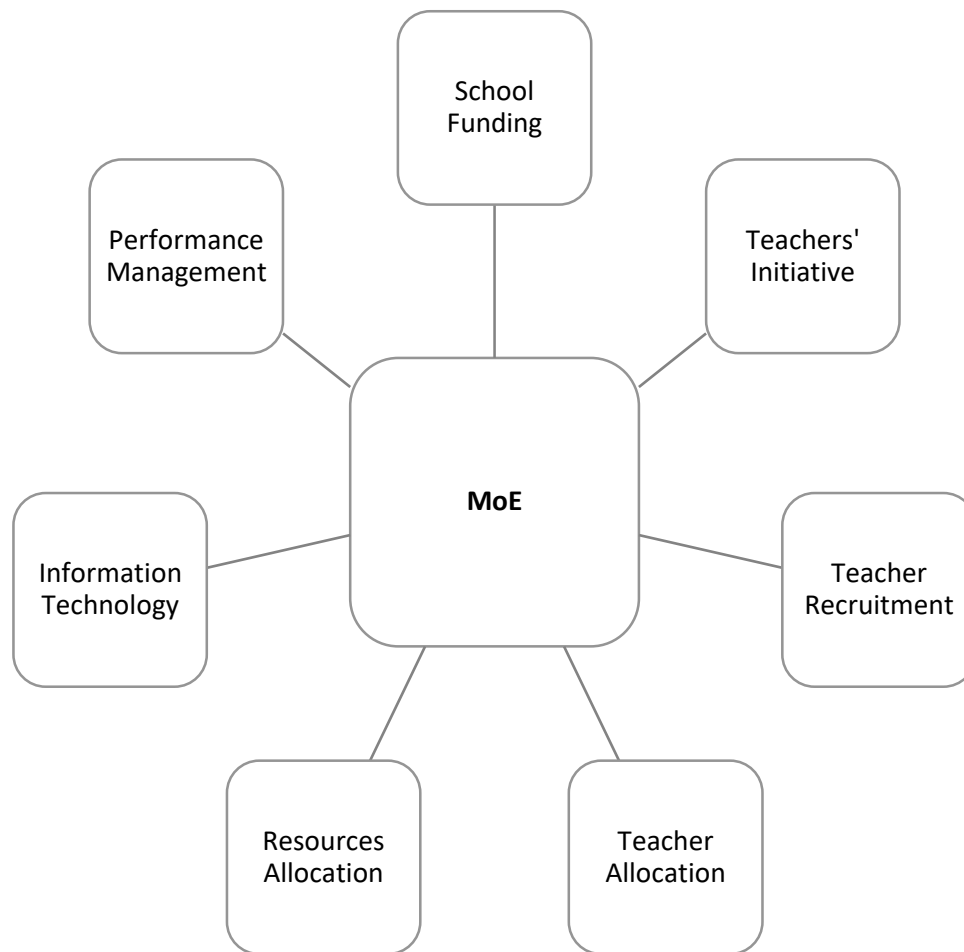
*Figure 2.5: School Improvement Project (SIP)*



Source: (Ministry of Education Bahrain, 2011a)

The MoE aimed to enhance its support of schools through improving the performance of its departments, putting in place systems to monitor the benefits from the experimental schools in order to then transfer what had been learned to other schools (Aksit, 2007; Ministry of Education Bahrain, 2011b). Figure 2.6 shows the programmes that the MoE implemented to enhance its managerial performance inside the Ministry itself (Ministry of Education Bahrain, 2011a).

*Figure 2.6: The MoE Enhancement Programme*



Based on the gap identified in the 'Diagnostic study' by the Reform Board the Ministry developed a strategic goal, which was to achieve excellence in all schools. Plans to achieve this goal were based on the premise that all schools need to be supported, so the MoE focused its efforts on improving the performance of departments within the MoE to ensure the appropriate level of support would be available. However, a key priority was to focus on low-performing schools in urgent need of improvement. Another strategy incorporated into the implementation plan was the decision to separate non-educational services from educational services, based on the argument that this would ease the burden on school management, allowing school principals to be more

focused on teaching and learning rather than on managerial and administrative tasks. As a consequence, managerial tasks were assigned to a new position created in each school called 'School Administrative Manager' (Ministry of Education Bahrain, 2013).

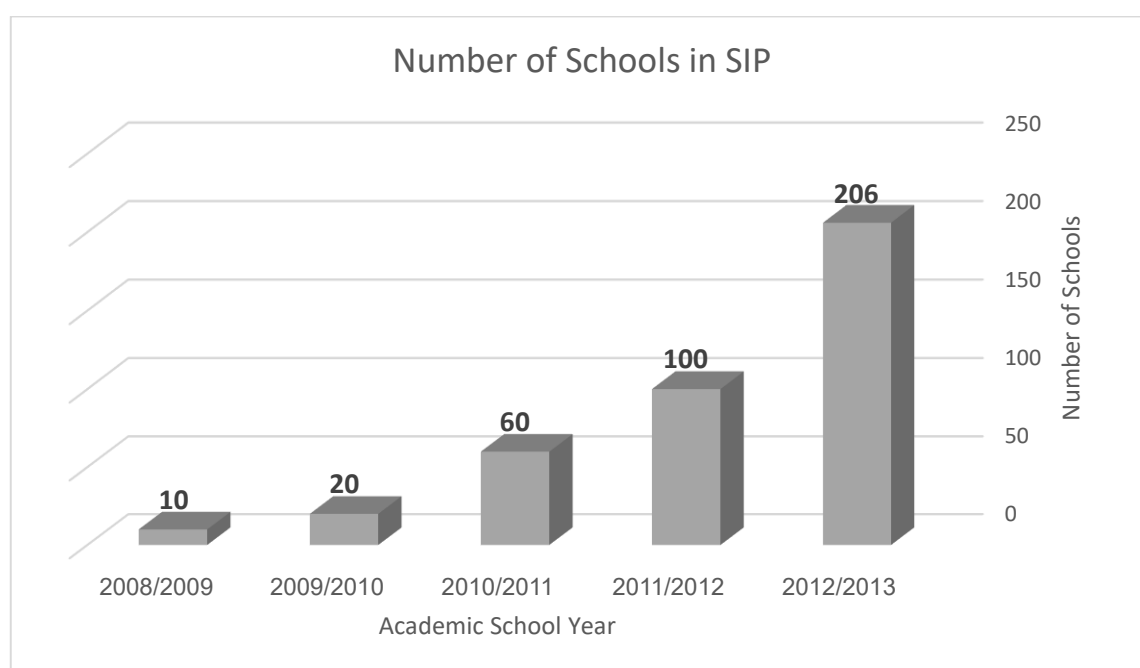
As well, a Communication Strategy was devised, whereby all the schools would be informed about any changes that were being considered as part of the education reforms, aiming to ensure that schools were aware of the things that were going to be changed, developed and improved. As a result of the SIP, schools were involved in training programmes, and also provided with support, guidance and continuous follow-up from the MoE (Ministry of Education Bahrain, 2009). Prior to the introduction of the SIP, teachers rarely were given professional development with regard to teaching and learning strategies, with the exception of English language strategies. Once the SIP was implemented all teachers were required to complete Academy 1 and 2, which were two packages of teaching and learning strategies aimed to upskill them. They were trained and supported inside classes to effectively implement these strategies. **Error! Reference source not found.** shows the expansion in the implementation of the SIP across all schools in Bahrain, and the key milestones in that progression are highlighted below.

#### *Milestones in the journey of SIP implementation*

##### *The SIP in 2009/2010: Programme expanded and intensified*

- Performance Management System was piloted
- Behaviour for Learning Programme was piloted in challenging schools.
- School day extension began as a pilot in a secondary girls' school.

*Figure 2.7: Number of Schools in the SIP*



*The SIP in 2010/2011:* Programme further expanded and developed

- New positions of Chief of School approved and School Improvement Partner established and schools organized into clusters.
- Intensive Programme established to support weakest schools (QQA grade 4 schools)

*The SIP in 2011/2012:* Programme extended

- New Senior Chief of Schools positions created to provide strategic leadership to schools
- Team established to support the 100 schools 'outside the programme'
- Bahrain Numeracy Strategy developed and training for numeracy coaches began

- Exemplar lesson plans developed within all secondary schools
- Opened a school with new design concepts

*The SIP in 2012/2013: Programme further broadened and deepened*

- All 206 schools included in the SIP
- *Challenge School* programme begun
- Arabic literacy strategy team established
- Planning began for increasing opportunities to learn in intermediate schools
- Expanded new building concept in two schools

*Numeracy and Literacy – building the key skills: Bahrain Numeracy Strategy*

#### Key Achievements

- Numeracy coaches fully trained and in school training of Mathematics' teachers
- Model lessons developed based on best practice
- The primary mathematics curriculum completely revised and aligned with international best practice
- All primary children received one hour of numeracy per day from 2013
- Every primary math's teacher received a complete resource pack to support the new teaching approaches.

*Bahrain Arabic Literacy Strategy. A work in progress*

High level plan developed based upon the key principles of:

- Ensuring Arabic Literacy Strategy receives the same support as the Bahrain Numeracy Strategy
- Making al-fusha (classical Arabic) the language of instruction
- Revising the curriculum with new challenging standards (expected learning outcomes) for each grade
- Developing Bahrain Arabic coaches to support others.

*Impact of the School Improvement Project (SIP)*

- Increasing the number of instructional hours per year.

The number of instruction days was increased from 121 days in November 2010 to 156 days in December 2012. **Appendix 2.4** shows the milestones of the increased instruction days.

*The Ministry's priorities for 2012 – 2014*

- Curriculum Reform (Arabic Literacy; Bahrain Numeracy Strategy; Critical Thinking; Problem solving; Citizenship and Human rights)
- Improve school environment (by creating new standards for current and new schools)
- Partnerships with stakeholders
- Review the Organizational Structure

- Leadership development (the MoE put a strategy in place for developing educational leadership)
- Schools to have increased focus on self-assessment, sustainability and accountability
- Focus on improving the most challenging schools.

The diagram in Error! Reference source not found. shows how all these components of student and school improvement fitted together.

#### *Summary:*

From the Ministry plans, it was evident that the MoE has had the resources, the focus and the determination to improve students' achievement and school performance. The improvement plan was conducted gradually and the MoE reports showed that there were some improvements in the implementation, at least initially. However, has the SIP had an impact on both student learning and school outcomes? Has student achievement improved nationally and against international benchmarks?

## **2.6 School Improvement Project (SIP) Impact**

#### *QQA Review Reports:*

Schools in Bahrain are ranked based on their performance measured by the QQA as Outstanding (1), Good (2), Satisfactory (3), or Inadequate (4).

Although the SIP was implemented in some schools from 2008, with all schools have been involved since 2012 (Ministry of Education Bahrain, 2009), the QQA reports show



that the performance of some schools is falling: One example is that of a secondary girls' school that was graded as 'Outstanding' in 2010 but had fallen to 'Satisfactory' by 2014. QQA stated in the annual Report 2012, that "of the 51 government schools reviewed in Cycle 2, eight are 'inadequate'; these eight schools had been judged 'satisfactory' in Cycle 1" (NAQQAET, 2012a, p.22).

#### *National Examinations Findings:*

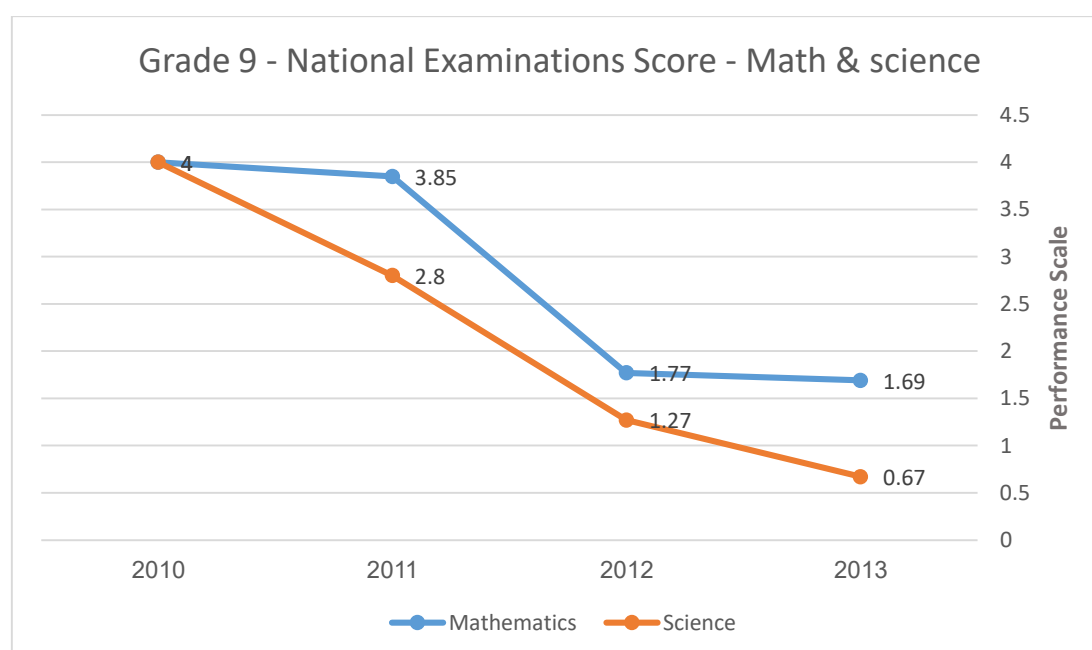
Since 2009 students in the KoB have been required to sit annually conducted National Examinations (NE) in the four core subjects, being Arabic, English, Math and Science. Students at the end of each Cycle, that is Grade 3 (3<sup>rd</sup> primary), Grade 6 (6<sup>th</sup> primary), Grade 9 (3<sup>rd</sup> intermediate), and Grade 12 (3<sup>rd</sup> secondary), are examined and the scores are announced and published on the Web. Table 2.3 shows the students' performance scores in the NE in Grade 3, 6, and 9 from 2009 up to 2013, and from this it can be seen that the scores deteriorated across all years and in all core subjects, and at all grade levels, except English grade 9. In science, for example, the Grade 9 students' performance scores declined from 4 (out of eight) in 2010, to 2.8 in 2011, 1.27 in 2012, and 0.67 in 2013, a trend that is illustrated by Figure 2.8, which also shows students' performance scores in the NE in Grade 9 in mathematics over a similar period (2009 to 2013).

Table 2.3: *Students National Performance Scores 2009 - 2013*

| <i>Grade</i> | <i>Subject</i>     | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <i>2013</i> |
|--------------|--------------------|-------------|-------------|-------------|-------------|-------------|
| <b>3</b>     | <b>Arabic</b>      | 4.00        | 4.05        | 3.70        | 2.69        | 1.99        |
|              | <b>Mathematics</b> | 4.00        | 4.35        | 3.4         | 2.05        | 1.52        |
| <b>6</b>     | <b>Arabic</b>      | 4.00        | 3.90        | 2.50        | 1.74        | 0.96        |
|              | <b>Mathematics</b> | 4.00        | 4.05        | 2.50        | 1.83        | 0.70        |
|              | <b>English</b>     | 4.00        | 4.05        | 3.30        | 2.47        | 1.29        |
|              | <b>Science</b>     | 4.00        | 4.05        | 2.85        | 1.94        | 1.47        |
| <b>9</b>     | <b>Arabic</b>      | -           | 4.00        | 2.75        | 1.51        | 1.07        |
|              | <b>Mathematics</b> | -           | 4.00        | 3.85        | 1.77        | 1.69        |
|              | <b>English</b>     | -           | 4.00        | 4.05        | 3.31        | 3.59        |
|              | <b>Science</b>     | -           | 4.00        | 2.80        | 1.27        | 0.67        |

Source: National Authority of Qualifications and Quality Assurance for Education and Training, (2013a).

Figure 2.8: Grade 9 – National Examinations Performance Scores 2009 - 2013



### *TIMSS Results:*

Government schools have participated in the TIMSS exams (science and mathematics) since 2003: Grade 8 participated in 2003, 2007, and 2011; Grade 4 participated only in year 2011. Although the SIP was introduced in 2008 to lift the students' average scores in TIMSS, the average scores in 2011 were not convincing, as shown in **Appendix 2.5**. Table 2.4 shows the distribution of science and mathematics average scores for grade 8 in TIMSS from year 2003 to 2011 (Martin, Mullis, & Foy, 2007a, 2007b; Martin, Mullis, Gonzalez, & Chrostowski, 2003; Martin, Mullis, Foy, & Stanco, 2011; Mullis, Martin, Fly, & Arora, 2011; Mullis, Martin, Gonzalez, & Chrostowski, 2003). The data shows that the average scores in science decreased in 2011, while they increased in mathematics. **Appendix 2.6** shows the inconsistency of students' results in the TIMSS achievement scores in grade 8 in science and mathematics. Therefore, it is difficult to build a solid story that the SIP improved the students' results in science while it failed in mathematics.

Table 2.4: *TIMSS Average Scores 2003 to 2011*

| <i>Subject</i> | <i>ASS 2003</i> | <i>ASS 2007</i> | <i>ASS 2011</i> |
|----------------|-----------------|-----------------|-----------------|
| <i>Science</i> | 438             | 467             | 452             |
| <i>Math</i>    | 401             | 398             | 409             |

\* ASS = Average Scale Score.

The decline that was found in the NE performance scores in science in grade 9 was also found in TIMSS scores. Students sitting TIMSS achieved 467 in science grade 8 in 2007, but their scores had declined to 452 in by 2011 (Martin et al., 2007b, 2011).

## **2.7 Summary**

Striving for excellence requires a paradigm shift from a compliance driven quality audit system based on inputs and processes to a high trust model of self-assessment and external evaluation and review.

In an increasingly competitive environment it is not enough to meet the national quality standards: the quest for excellence is about continuous improvement and striving to be amongst the best. A balanced approach to the pursuit of excellence occurs through a student-centered focus to quality that is integrated into all practices, including the effective and efficient use of all resources and capabilities to ensure that the outcomes add value for the stakeholders.

As the absolute goal for education reform is to improve student achievement across the schools, there is no benefit of improving any aspect of the school if student outcomes are not also subsequently seen have been improved (Coe, 2013; Creemers & Kyriakides, 2008). To explore more fully the impact of the school improvement initiative in Bahrain it was necessary to investigate other areas, such as the procedure for implementing the projects, the role of the School Improvement Team (SIT), the role of Cluster Team, the role of leadership, the effectiveness of teachers' professional development programmes, and of the professional learning communities put in place.

This section has described the place of the current study within the context of educational reform in the KoB to understand how the project to build schools capacity for continuous improvement towards sustainable excellence was conducted.

## **Chapter Three: Literature Review**

### **Introduction**

World-wide there has been a focus on schools and schooling as countries grapple with increasing competition in a more global economic environment that requires work to be of an international standard and workers therefore to have a high level of skills and knowledge. At the same time, the very nature of work is changing rapidly as technological advances have been applied to increase the efficiency of work processes and enhance the effectiveness of support services. As the previous chapter showed, Bahrain's signing of the free trade agreement with United States of America in 2006 brought with it both opportunities to diversify its economy in the face of depleting oil reserves, but also many challenges as it entered the global trading arena. Consequently, huge pressure was put on the education system to ensure that young Bahraini entering the workforce had the skills and knowledge required for the twenty-first century. This resulted in the introduction of the School Improvement Project (SIP) across all government schools in Bahrain at a time when they were facing the challenge of expanding their provision to deal with increasing numbers of students due to natural population growth as well as immigration. Whilst acknowledging the local culture, this chapter places Bahrain's School Improvement initiative within this wider context and outlines what the Kingdom can learn from the international literature focused on school improvement.

The first section focuses on trends in learning and pedagogy and introduces the schools as organisations established to facilitate learning in the wake of economic changes. The evolution of the economy in Bahrain, as in most Western countries, is the driving force

behind school reform initiatives, as outlined in Chapter 2, so this literature review seeks to develop an understanding of the concepts of school improvement and school effectiveness, school capacity building and sustainable improvement. A common thread within the research is the importance of leadership for sustainable improvement and specifically the critical role that teachers' leadership plays. Consequently, the capacity and capability building aspects required for successful school improvement are highlighted, with a review of literature related to the professional development of teachers, the utilization of professional learning communities, and the role of external support and internal improvement teams. Finally, the chapter concludes with a section that considers the literature concerning managing change in order to learn from others about effective implementation of innovative educational practices. This review serves as a vehicle for developing the conceptual framework for this study, which is outlined in Chapter Four, exploring the meaning of, and the strategies involved in, building schools' capacity for continuous improvement towards sustainable educational excellence in the Kingdom of Bahrain (KoB).

### **3.1 Trends in Learning and Pedagogy**

The quality of teaching is often listed as a hindrance in the implementation of education reform, with inadequate training and lack of experience amongst teachers identified as common problems in schools, according to Plank (1987). The quality of schools depends significantly on the quality of teaching and the quality of learning, or how well teachers teach and how well learners learn, and outstanding school leaders create a school environment that enables students and teachers to perform well. Indeed, the literature suggests that the main elements in building school capacity for sustainable

improvement are teaching and learning, students' personal development and academic achievement. Learning involves changes in the skills or knowledge required to do something and is generally defined as:

... all relatively permanent changes in potential for behaviours that results from experience but are not caused by fatigue, maturation, drugs, injury, or disease. Strictly speaking, of course, learning is not defined (human or nonhuman) as a result of experience. Changes in behavior are simply evidence that learning has occurred (Lefrancois, 2011, p. 4)

However, there are many theories of learning in the literature, with a shift from a developmental to a sociocultural perspective evidenced since the late twentieth century, and a recent focus on lifelong learning that promotes the skills and competencies necessary in the workplace, according to the State of Victoria's Department of Education and Training (2005). It is important to link theory to practice in the design and development of any instructional system, and theoretical constructs emerge from our perspectives on knowledge. Epistemology focuses on how we know the world. It asks how we know that what we think is real. Therefore, there is a link between effective teaching and the way students learn (Ambrose et al., 2010).

Research exploring, on one hand, the effects of different approaches to teaching, and on the other hand, "how humans learn, how they acquire knowledge, process information, develop skills, think and reason, has started to merge" (Westwood, 2008, p. v). Constructivists believe that learning is when an individual discovers for him/herself (Long, 1968). According to Zevenbergen (1995, as cited in Westwood, 2008), learning requires creating understanding from action and reflection, not from teacher's presentation or a textbook, while Mayer (2004, also cited in Westwood, 2008),

suggests that learning can be stimulated by verbal and visual means. However, we should not be asking which of the two approaches (constructivist, and instructivist or direct teaching approach) is better, "but rather which approach is better for teaching what type of curriculum content", Westwood argues (2008, p. 16).

It has long been recognized that improving school performance requires enhancing teaching quality (Newell, 1996), and making teaching more student-centred (Knight, 2006). The judgement on the quality of a school is reflected in the quality of teaching (Barber & Mourshed, 2007), with high performing teachers enhancing students' achievement. Barber and Mourshed indicated that students' progress 50 percentiles with high performing teachings compared with low performing ones (2007). In the new conceptualization of schools as learning communities (discussed further in section 3.8) "the role of a teacher is somewhat redefined due to new beliefs about how learning occurs" (Westwood, 2008, p. 11) and in this approach a teacher becomes a learner, facilitator, supporter, and leader, rather than an instructor. The needs of the children and the cultural context are also aspects that warrant consideration when determining the appropriate teaching approach for effective learning to occur, and this is the subject of section 3.2, which follows.

### **3.2 School Culture**

The way people think and behave in various cultural contexts has been well described in the literature (Hofstede, 2011; Johnson, Snyder, Anderson, & Johnson, 1996; Spencer-Oatey, 2012). Definitions range from Deal and Kennedy's simple description of culture as an understanding of "the way we do things around here", with its elements of shared values, beliefs, ceremonies, and network of communication, to more elaborate



variations where culture is seen as "the collective programming of the mind distinguishing the members of one group or category of people from another, revolving round basic issues that have to do with group membership, authority, gender roles, morality, anxiety, emotions and drives" (Hofstede, 2011, p. 6).

There are different cultures relating to different nations and periods as well as different cultures within a nation and within organisations, such as schools having different standards. Definitions of culture vary from the general to specific, depending on the discipline and the level of analysis. Societal culture can be defined as the values, attitudes, beliefs, and behaviours that are shared by the vast majority of people in a group or nation (Harvey & Stensaker, 2008), but in such a definition, it is noted that behaviour is derivative, not central. Organisational culture is an important factor in forming organisational structures and practices, what Schein (2004, p. 26) refers to as "artefacts". Artefacts of organisational culture can be observed both directly as manifestations of human behavior, as rituals for example, as well as through the testimony of individuals and witness of documents (Maali & Napier, 2010, p. 2). In all definitions of culture, therefore, the history of the group seems to be a key component.

Whatever their size, all groups must deal with two major sets of problems, firstly survival and secondly the ability to adapt and learn. So, culture develops from shared experience, leading to "a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems", according to Schein (2010, p. 17). So culture is learned, not inherited. It derives from one's social environment, Spencer-Oatey, (2012, p. 6) explains. This is especially evident in the study of Arab culture, which in pre-Islam times, around the late sixth and early seventh

century A.D., was defined geographically as those people living in the Arabian Peninsula, characterised by "total absence of political organisation in any form" other than the authority of the chiefs over their tribes, power that rested on their character and personality: "The desert could support only a limited number of people, and the state of inter-tribal war maintained a rigid control over the growth of population" (Razwy, n.d.). Consequently, there was limited social, economic and political development at that time.

The birth of Islam brought with it a different sort of societal organisation for the region and beyond as the Moslem religion spread, "an association formed according to Divine Law, for the purpose of harmonious and peaceful coexistence" (Mohammed Muslehuddin, 1997, cited in Sumaya, and Shadiya (2012). Islamic society or *Ummah* is not determined at all by geographic considerations but based on a unifying belief and "Divine Law, which regulate their relationships and their activities for the continuity and improvement of the society. This definition includes non-Muslims with all their rights, duties and obligations under an Islamic state" (Sumaya, Mohamed S; Shadiya, 2012, p. 114). Such a societal culture is Islamic and *Tawhidic* in the sense that its existence is based on the submission to one God and conformation to His Shari'ah laws as guidance for the continuation of this society (op. cit., p.118), unified by common norms and values as outlined in the Holy Qu'ran. Muslims are to enjoy the good, forbid the evil, and believe in Allah. The Qu'ran recognises the equality of all people in the sight of God (including people of different ethnicities as well as gender), the worth and dignity of human beings, and their entitlement to access to the earth's resources, whether believers or not. According to Zaheer (2014), the Qu'ran requires Muslims to establish justice and balance inside the society and consult before making decisions.

Gulf cultures are inherently oral cultures, (Torstrick & Faier, 2009) and the Islamic principles that underpin everyday life are today, as in the past, learned through memorizing the Qu'ran, as well as experiencing their application as a lived reality. By learning the Qu'ran children effectively learn the Arabic language, as well as gaining guidance on how to conduct their daily lives. Bahrain's Museum identifies that the very first schooling often took place at the home of a Muller, someone recognised as having a comprehensive knowledge of the Qu'ran, and children learned by rote, chanting each verse till it was memorised verbatim. As already described in Chapter 2, Quran schools were the only source of education in Bahrain prior to the 20<sup>th</sup> century. However, following the end of the First World War, Western ideas became more widespread in the country, culminating in the opening of the first public school of Bahrain, Al-Hidaya Al-Khalifia Boys School, which was founded by prominent citizens of Muharraq and endorsed by the Bahraini royal family. The country's first Education Committee was established by several leading Bahraini merchants, headed by Khaikh Abdulla bin Isa Al-Khalifa, the son of the then-ruler of Bahrain, Isa ibn Ali Al-Khalifa, who acted as the de facto Minister of Education. The Bahraini Government took control of the schools in 1930, but Arabic and Religious studies remain an important part of the school curriculum, and Islam continues to underpin all aspects of everyday life.

However, today the fundamental principles of Islam are observed to be overlaid by cultural characteristics that can be seen to have been derived from tribal organisation that pervaded the Arabian Peninsula in days gone by. Bahrain's culture is similar to Arab culture, being traditionally dominated by interpersonal networks, and deep connections of kin and obligation that provide a pervasive foundation for important decisions and information sharing (Rabbi, 2009, cited by Daylami et al., (2015, p. 121). Given its common history, the Arab region broadly shares a common heritage and core

values and faces similar economic and social challenges. Arab societies, are characterised by strong family values and consequently trusting relationships are very important. Arabs feel protected by, and great dedication towards, their kinship groups, although these relationships can also be extended to include groups based on other ties, such as being from the same city or region, school, or workplace. Attachment to one's group proves to be very helpful in the various daily life aspects. For example, people in superior positions are expected to provide assistance to members of their own groups, providing help in finding a job, getting admitted to a hospital or a school, removing hurdles from official procedures and sorting things out with government departments. Similarly, the group also plays an important role in the social as well as the economic life of individuals, being influential in making arrangements for marriages and funerals, lending money and helping when a member of the group is facing a crisis. Such a network of interdependent relationships reduces the level of individualism in Arab society where people generally prefer to live in a family networked group more than as individuals.

These societal traits are reflected in the way organisations, such as schools, function in the Arab world, where critical decisions and approvals are only taken by top management. As a consequence, for example, the KoB's school improvement project managers have limited access or control over financial resources. Naturally this impacts directly on financial support alignment with project schedules, selecting suitable people for certain jobs, or even changing things in systems. This is because in Arab societies public organisations generally have more rigid hierarchies and structures, as well as more bureaucracy generally and, with consensus decision-making also delaying the process considerably, the deep culture of public sector organisations affects timely implementation. Consequently, Arab cultures usually implement changes top-down

rather than bottom-up, leading some to argue that the change culture is heavily related to political ambitions or international change (Harvey & Stensaker, 2008).

Culture also affects learning in schools, as Al-Harthi explains:

Western world views include competition, individuality, timing and scheduling, dualistic thinking, nuclear family, superiority of their world view, separation of religion from culture, and task orientation. In comparison, non-Western world views include cooperation, collectivity, relativity of time, holistic thinking, extended family, religion as a part of culture, acceptance of other cultures, and social orientation (2005, p. 2).

Bahraini culture, underpinned by Islamic Religious beliefs, has a considerable impact on human perceptions, interpretations and actions that subsequently influence organisational decision making and school performance in ways that are not always perceived as positive. The World Bank (2008), for example, suggests that investment in education in the MENA region has not resulted in the anticipated level of economic growth due to issues with both educational quality and quantity. This source highlights that compared to international benchmarks, education in the Middle East and Northern Africa disadvantages its learners by high teacher to pupil ratios and limited opportunities related to fewer years of schooling; shorter school days and fewer weeks in the academic year. Outdated curricula with a reliance on content and rote learning rather than critical thinking, coupled with shortages of qualified teachers, also pose challenges to the quality of education in the region (Kaasa & Vadi, 2010). Culture unifies people, but it may also act to prevent change. It is vital in generating educational reform to have a school culture that encourages and supports teachers' learning, providing a stimulating context for teachers to change (Jurasaitė-Harbison & Rex,

2010). Teachers' work is embedded in social, cultural and school contexts (Samuelsson & Lindblad, 2015), and cannot be looked at in isolation. People's culture, their beliefs and behavioural norms can contribute to, or block, the process of developing and implementing improvements (Kaasa & Vadi, 2010). It has been found that collaborative work cultures, for example, make a difference in how well students learn, although it is not clearly known how these cultures operate to produce such effects (Fullan, 2000). Whilst the British Council (2013) suggests MENA countries learn from others in establishing a quality education sector to support economic growth, much has also been written about difficulties of applying educational concepts and policies developed in the West to other parts of the world (Billing & Thomas, 2000; Harvey & Williams, 2010; Harvey & Williamson, 2010).

It has been established that there is a relationship between learning and culture. This study, which investigates the school improvement initiative in Bahrain, brings a complex cultural mix as the schools are Bahrain government institutions, but with a mix of both expatriate and local teachers, overseen by the Ministry of Education with a Bahraini Senior Management, hence providing the opportunity to gain valuable insights into how culture affects the implementation of change, and lessons for managing change in school settings.

### **3.3 School Reform Initiatives**

Linked to the changing needs of the labour market as economies globally diversify from a reliance on heavy industry and manufacturing, there is an urgent need to secure ways of raising student achievement in schools (A. Harris & Chapman, 2004) in order to ensure a pool of skilled labour that better meets the needs of tomorrow's knowledge-

based economies. Therefore there are continuous efforts being implemented to improve all schools within most countries round the world, based on the belief that education is the key to global productivity, an important factor in developing human resources, and a major factor in the determination of economic returns on investments in education (Plank, 1987; Schoening, 1998). Recently interest has turned to finding answers to questions such as: "how to do a whole system reform", "How to bridge the gap in students' achievements", and "Where to begin?" (Barber & Mourshed, 2007; Mourshed, Chijioke, & Barber, 2010) as, although many countries have undertaken some form of school system reform, very few have succeeded in improving their systems to develop a better situation (Barber & Mourshed, 2007; Mourshed et al., 2010). For example Bifulco, Duncombe and Yinger (2005) investigated the impact of whole-school reform on students' reading performance in New York City, and they found that the school reform programmes had no systematic impact on students' reading. Similarly, Coe indicated that "the evidence that levels of attainment in schools in England have systematically improved over the last 30 years is unconvincing" (2013, p. 3), a finding congruent with the work of Muijs, Chapman, and Armstrong (2012), who found that schools' participation in *Teach First* programmes, (based on the US Programme Teach for America), provided ambiguous results on the impact of learning.

The process of changing school cultures (re-culturing) in ways that support whole change (Copland, 2003) is what makes a difference in improving schools' performance (Fullan, 2000), utilising strategies such as diagnostic information, systematic planning (Keefe, 1994), communicating a shared vision of where the school is going (Muijs & Harris, 2006; Wikeley, Stoll, Murillo, & De Jong, 2005), what the school's expectations are, and what the school can achieve (Muijs, Harris, Chapman, & Russ, 2010). Re-culturing involves traveling from a limited pedagogical situation to a position where

teachers' new knowledge and skills can make a difference in students' achievement, resulting in a positive effect on both the school culture and structure (Fullan, 2000).

However, re-culturing schools is not an easy task, as it seems policy makers, school leaders and researchers play different roles in improving students' achievement: Policy makers set goals and create the conditions for teachers to meet these goals in practice; School principals are expected to develop the quality of teaching inside the school using the guidelines from the policy makers, whereas, researchers develop and test theories about quality in education to help the policy makers to understand the challenges in education in order to enhance the practice inside the school. However, the relationship between theories and practice in educational effectiveness has not always been clearly articulated (Creemers & Kyriakides, 2008) and there are a number of publications that support this view, such as Creemers and Reezigt (1997) and Teddlie and Reynolds (2000). Therefore, policymakers, school leaders, and educators need to be supported to develop a common understanding of how a system with certain environmental conditions has mapped a path, or can map a path, to create and sustain improvement (Mourshed et al., 2010). This top down model of change is only one approach and an alternative is provided by the idea of professional learning communities that suggest a bottom up model, where teachers and learners take control of this process of continuous improvement as outlined in section 3.8 of this chapter. In this model, the whole school reform programme focuses on the school as the unit of improvement, unlike the top down models, which focus on system wide policies. (Bifulco et al., 2005).

Therefore, to understand how the education system can map a path for improvement and sustain progress, the school needs to be taken as the centre of improvement for the education system, where all its parts work closely together to make progress and achieve sustainable improvement. Improving schools' performance can be seen to be



multi-dimensional, rather than uni-dimensional, the result of implementing a range of initiatives and policies simultaneously (Fullan & Miles, 1992). Hopkins et al., (2014) reviewed the last four decades of school effectiveness and school improvement research and found that there is much about how to improve a single school, but few studies evidencing, successful efforts at sustainable improvement. The roles and responsibilities of school principals, senior teachers, and teachers within schools on the one hand, and the support team, school improvement partners, subject supervisors, and the Ministry of Education on the other hand, should be clearly defined and each must be committed to the school improvement process, according to Kuijpers, Houtveen and Wubbels (2010). Gaining an understanding of the key players' reactions and responses to education reform, which Hargreaves found in his study of 50 Canadian teachers differed according to their age, subject specialty, and gender, is crucial for ongoing improvement and the maintenance of achievements (2005). Andy Hargreaves argued that sustainable improvement needs to have mixture of teacher age groups, mentoring across the generation and collective learning from wisdom and experience. He found that though many schools have the above mentioned, improvement is unsustainable. Since that time, further Canadian Studies centred on the Province of Ontario, focused on three key areas: improving student outcomes, reducing the gaps in achievement, and increasing public confidence in government education. In 2004 nearly 5000 schools were engaged in the Ontario reform with the result that 10 percent more students are now achieving the provincial standard, and the number of schools with very low performance has fallen by three-quarters. Ontario's success has been attributed to the focus on student learning, achieved by reducing the number of students in each class to a maximum of 20, and providing professional development programmes to teachers and principals, both groups being recognised as key players. Some of the main outcomes of

this reform project were the reduction in the poorly performing schools by 75 percent, an increase in public confidence, and higher teacher retention, with early retirement amongst teachers dropping by 50 percent (Levin, 2008). The building of a school's capacity for improvement was central to this successful reform project, which also worked on other areas such as teachers' commitment, the impact of high learner expectations, a focus on students' literacy and numeracy skills, effective use of data and feedback, and the need for strong positive relationships with parents in order to sustain the early improvement over the longer term. This Canadian reform project appears to have been sustainable because it incorporated many of factors that previous research had indicated were important, but most importantly placed the school community at the centre of the reforms. Whilst, Coe (2013) indicated that smaller classes have not been found to have a significant impact on student learning, there were many other factors involved in the Ontario project that made it successful and sustainable. It is therefore very useful to compare this experience with that of the United States of America.

In the USA, despite two waves of reform over the past two decades starting in 1983, the schools did not change much neither did the teachers. The first wave increased standards and regulations, which resulted in increased teachers' salaries, and an increase in the school day and year. The criticism of the first wave was that it applied a top-down approach and did not add any capacity to the system. Therefore a second wave of reform was introduced, which focused on strengthening the relationship between the school and parents, addressing the diversity of students' needs, attracting and retaining high performing teachers by providing professional development sessions to change the roles of the teachers (Desimone, 2002). This multi-faceted approach also did not appear to produce the expected results, with little change evidenced in either school organisation or teaching approaches. In response to the failure of these earlier reforms,

a third wave of reform, known as the Comprehensive Schoolwide Reform (CSR), was implemented, focusing on improving the entire school (Desimone, 2002), rather than just one or more elements in the schools. However, there was "great variation in the level and consistency of implementation of CSR models, both within and between schools" (Desimone, 2002, p. 6), and that might lead to different understanding, different focuses, and different learning outcomes.

In contrast, Chinese education reform aimed to broaden education and to implement a whole child approach through the development of the curriculum examination scores focus. By revising the school curriculum and focusing on one area it has apparently succeeded in a number of schools, according to Dello-Iacovo (2009).

So, from these examples (Canada, USA and China), it can be seen that school reform differs from country to country according to its needs, and its focus: while some countries focused on one dimension to enhance school performance, others focused on multi dimensions to achieve the same purpose. What can be concluded, though, is that the focus on the outcome, on students' achievement, is more important than the process used to reform the school system.

*To sum up*, education reform initiatives are intended to improve schools' performance and make learning more effective and meaningful (Aksit, 2007). It appears that high performance schools selectively and carefully identify the initiatives that need to be implemented and they prepare the school community for the change (Zendeli, 2011). However, reforms were seen to fail, or were not effectively implemented, because attempts to solve educational sectors problems were superficial (Fullan & Miles, 1992) or were implemented for political reasons rather than to meet identified educational requirements (Baskan & Erduran, 2009), points explored further in the next sections.

In saying this, mass education is clearly linked to economic requirements, and government investment is justified on this basis. Indeed, the need for any country to invest in school reform appears to be driven out of economic necessity and a wish to become more globally competitive. The whole school effectiveness movement discussed in the next section must therefore be seen within this context of social, technological, economic and political change.

### **3.4 School Improvement and School Effectiveness**

As a whole, the Arab Region has achieved significant progress on the social front since the 1970s, developing extensive health and education systems based mainly on state welfare policies and aided by Islamic traditions of charity and family support networks (United Nations Development Programme Regional Bureau for Arab States, 2004, p. 16). However, Arab education systems, "often touted as engines of modernization in other regions, have not been successful in positioning the workforce to meet the labour needs of today nor in stimulating research and development" (ibid.). The resulting mismatch between the education system and the needs of the labour market has led governments, educationalists, and parents to question the performance of both the system itself, and their children's schools. World-wide concerns about the effectiveness of education have led to questions being asked about the role of schools, how schooling contributes to students' achievement, whether some schools are performing better than others, and indeed, how a country's education system compares with another, by ranking against international standards. In other words, stakeholders at all levels want to know the effectiveness of schooling (Gorard, Hordosy, & Siddiqui, 2013).

#### *School Effectiveness*

Townsend describes several different definitions of school effectiveness including that of Levine and Lezotte (2007, p. 287), which is "the production of a desired result or outcome". School effectiveness is defined by Scheerens as the average achievement of students at the end of a period of formal schooling (2000), whereas Callender argues that value-added can be referred to as the growth a student makes in the annual assessments compared with the previous year (2004). Indeed Scheerens, Witziers, and Steen suggest that student achievement should be the basic criterion to judge the effectiveness of a school (2013).

In contrast, Coe argues that it is misleading to assume "that learning gains can be interpreted as effectiveness" (2013, p. 11). Coe (*ibid.*) clarifies that value-added is not always the same as effectiveness, illustrating this by citing the situation where teaching the top sets of students might yield high results, though the added value may be questionable. Indeed there is an extensive literature emanating from the US, where using value-added to evaluate teachers is widespread (Ballou & Springer, 2015; Jiang, Sparte, & Luppescu, 2015). Researchers are somewhat divided about the benefits of this, but there are certainly plenty who argue that it is inappropriate, such as Goldhaber (2015); Goldring et al., (2015), and Douglas N. Harris and Herrington (2015). Others stress the need for specific cautions in use or in interpretation (Ballou & Springer, 2015). Indeed, Coe and Fitz-Gibbon (1998) argue that effectiveness does not mean value added, explaining that value-added models can only measure half of learner performance, such as the progress students make in annual examinations. They argue that aspects such as motivation and self-esteem might provide more useful indicators of school effectiveness if measured appropriately, adding that while the "value-added data may not answer your questions, ... it can help you to ask better ones" (Coe, 2013, p. 10).

The term school effectiveness has been widely used since the 1960s (Ghani, Siraj, Radzi, & Elham, 2011). In 1966, Dr. James Coleman published *"The Equal Education Opportunity Survey"* report, which concluded that family background affected student learning and public schools did not make a difference in student achievement. Other writers have similarly argued that family factors prevented children from learning (Cortez-Rucker, Adams, & Cortez-Rucker, 2013; Lezotte, n.d.). Coleman's report stimulated a great interest in this area, providing a basis for "many of the studies that would later come to define the research base for the Effective Schools Movement (Lezotte, n.d., p. 1). Equity is the driver to make the school effective for everyone Edmonds (1979) argues, regardless of their socioeconomic status or family background, according to Lezotte (n.d.). Whilst Edmonds did not accept all the conclusions with Coleman's report, he did acknowledge that family background makes a difference in children learning, Cortez-Rucker et al., explain (2013). By 1990 the school effectiveness movement was at its peak, according to McInerney, Dowson, and Etten (2006) and subsequently the concept has been widely applied to understand the effort the school makes to improve all students' performance. Since that time, the focus has widened with further studies building on this approach. For example, Ghani, Siraj, Radzi, and Elham's research (2011) conducted in Malaysia and Brunei found that the excellent schools in both countries had adopted effective school practices, but they also concluded that the role of the school principal was instrumental in bringing about change. Indeed, Gill et.al. (2004) claim that the basis of the school effectiveness drive in the 1990s has refocused on shared values and student-teacher relationships in order to enhance commitment to the development of high standards of students' achievement. Other writers argue that schooling is about many more things than just students' achievement (Ladwig, SiMoLa, & Berends, 2010), a conclusion supported by De

Maeyer et al., (2010), who found that school effectiveness studies were generally restricted to the basic disciplines such as mother tongue and mathematics, concluding that there is a need to broaden the approach to include various other criteria to support the concept of school effectiveness. All of this debate in the literature leads to the question of what makes an effective school?

The research into school effectiveness identified many characteristics associated with high performing schools. Researchers like Muijs et al., (2014); Robinson, et al., (2008); Barber (1995); Scheerens et al., (2013)l Centra and Potter (1980); Hansen (1981) and Desimone (2002), identified nine common characteristics found in effective schools:

- A professional leadership that determines what goes on inside the classroom, enabling staff input into decision making and planning for school improvement, providing support and guidance to all staff to enhance their performance.
- A shared vision and goals, where all staff have a common sense of purpose and clear targets they work towards.
- An appropriate learning climate for students.
- Deep learning, where there is a focus on helping students to learn and achieve by providing high quality teaching that recognises that different students learn in different ways.
- Setting high expectations, which are clearly communicated to students.
- Recognition, with positive reinforcement of good work by both staff and students.

- Monitoring progress, with systematic monitoring of the achievement of students and the school as a whole, with results that are evaluated, analysed, and used for improvement.
- Professional learning communities, where teachers can learn from each other, supported by professional development programmes provided systematically to teachers according to their needs.
- Home-school relationships involve parents in the life of the school and enable them to take greater responsibility for their children's learning.

However, although the research in school effectiveness identified these nine common characteristics associated with high performance schools, it did not describe the practical methods by which schools can become successful (Desimone, 2002). As Scheerens and Creemers (1989, p. 692) explain there are many reports of "what works in education", but few theoretical explanations available of "why things work in education". These nine common characteristics are frequently brought together in models seeking to improve school effectiveness, such as the *Model of School Effectiveness* (Gorard, 2010), and *Comprehensive School Reform* (Datnow & Borman, 2003). In general, these models seek to explain the relationship between the characteristics of effective schools and student achievement, most adopting an input-process-outcome and multi-level structure, usually targeting students, classroom, and school levels (Bosker & Scheerens, 1994). Such models aim to channel the volume of effort to ensure added value and identify the distance travelled by schools that have taken steps to improve and enhance the achievement of their students (Reynolds et al., 2014). Models are also used at all levels of school reform.



### *Reform Models:*

In achieving the purpose of enhancing school performance, researchers use models for improvement. There are a number of models for school reform focusing on one area of schooling, such as enhancing leadership practice, developing teachers' professional practice, or enhancing the curriculum (Schoening, 1998), with classic examples being teacher professional development in the USA (Craig, 2009) and the integrated professional development model for effective teaching (Kuijpers et al., 2010). The later model was created by combining elements of the transfer teaching techniques and those focusing on developmental-reflective coaching. However, such unidimensional approaches generally failed to reach their objective, with little evidence of effectively increasing students' achievement, according to Desimone (2002). Because of this, Kuijpers et al. maintain that the professional development model must be embedded in a comprehensive school-improvement programme (Kuijpers et al., 2010). Other approaches consider improvement as a holistic entity of many facets that need to be simultaneously implemented in schools to make the progress desired (Crowther, 2011), examples being the *School Development Program and Success for All*, *The More Effective Schools programmes* (Bifulco et al., 2005) and *the COSMIC C-B model* (Crowther, 2011). Because of the apparent importance of such models in effective and sustainable school improvement they will be discussed further in Chapter 4.

*To sum up*, research in school effectiveness was found to focus generally on variation in learning outcomes between schools, or countries (Reynolds et al., 2014) and was restricted to outcome-oriented factors (Bosker & Scheerens, 1994). This approach has been changed in recent years with countries trying to implement the findings of school effectiveness research directly into school practice by the implementation of school improvement initiatives (Reynolds, Davie, & Phillips, 1989).

### *School improvement*

According to Akist, while school effectiveness is more concerned with school outcomes, school improvement focuses more on the process of the school (2007). It appears from the literature that the focus on school effectiveness is on the academic outcomes (such as students' exams results), while with school improvement the focus is wider, being based also on non-academic outcomes (such as professional development). Some argue that the focus of school improvement is shifting from an emphasis on changing school processes to outcomes, seeing whether the changes are evidencing improved student outcomes. However, it appears that there is little conclusive evidence that identifies clearly the effect of non-academic initiatives on students' learning (Ladwig et al., 2010). Indeed, whilst the importance of capacity building through professional development via learning communities, the use of external support teams, strategic planning, and an internal focus on collaborative patterns of staff development to enable teachers to see and implement good practices are strategies identified through more recent studies on school improvement (Potter, Reynolds, & Chapman, 2002), without the link to outcomes the argument for their adoption is not strong.

Never-the-less, through utilising all these ideas, effective school improvement is defined by Creemers, Stoll, and Reezigt as "planned educational change that enhances student learning outcomes as well as the school's capacity for managing change" (2007, p. 2). But how does school improvement occur? According to Creemers and Kyriakides (2008), the first step to be taken in any school improvement initiative is to determine the starting point, where the school or system is, and to gain a clear understanding of the goals to reach and how to improve the school's practices to achieve them. In this approach, establishing a collaborative commitment for improvement is crucial, to share

a clear understanding of the destination and how the school's performance is going to be improved. Aksit's (2007) overview of research on school improvement suggests a number of key factors that should be taken into consideration, such as sustained professional development, high student achievement expectations, strong parental involvement and shared decision-making, which were also identified in the literature covering school effectiveness. Similarly, despite the volume of research on factors related to school improvement, there is no specific knowledge about how and why improvement occurs according to Fullan (1985).

From the expansive range of school improvement studies, Fullan (2005); Hawley and Sykes (2007); and Copeland (2003, cited in Anderson & Kumari, 2009) recognise that systematic long-lasting improvement in schools will not happen simply because of the implementation of a new initiative, a set of professional development programmes, or the implementation of new policies. With this realisation has come a recommendation that schools should establish learning communities, where all academic and managerial staff are engaged collaboratively in a purposeful continuous cycle of action, where the impact of strategies implemented is continuously monitored and evaluated, with a rethinking of better solutions to achieve the shared vision (Anderson & Kumari, 2009).

*In summary* it can be seen that there is a lot of overlap between the idea of effective schools and school improvement. Not surprisingly then, Hopkins, Reynolds, and Gray (1999) note that for practical purposes in school development projects, the elements of both are combined. Consequently, to effectively evaluate a school, elements from school effectiveness as well as the elements from school improvement need to be brought together, according to Creemers et al., (2007). Such a combination emphasises the need to collect data about students' achievement from multiple sources, both the achievement of students from the school process and the implementation of the school

improvement initiatives within the school context (Creemers & Kyriakides, 2008). As Hoeben explains, the focus on effective elements for students' outcomes answers the question: "Does the school achieve better student outcomes?" (1998, cited in Creemers et al., 2007, p. 2). The improvement elements, on the other hand, refer to the school leadership, or/and professional development, seeking to address the question of whether the school manages change successfully. Recognizing the value of this combination gives rise to yet a further question, which is how to link the elements of both the school effectiveness and school improvement movements? The focus on capacity building for improvement has been suggested as the way forward.

### *School Capacity for Improvement*

Capacity for improvement appears to be the key linking idea between school effectiveness and school improvement. A school identified as having capacity for improvement can be recognised because it is "a school that sustains its effectiveness by successfully managing change in a context of instability and reform" (D. Hargreaves, 2001, p.2), a concept that warrants further exploration, which occurs in Section 3.5 below. Both school effectiveness and school improvement are underpinned by the acknowledgment of the importance of the teaching and learning process on students' achievement, a point highlighted in Section 3.1. Evidence for linking teaching and learning with students' achievement has come from external inspection organisations, which combine process and outcomes to judge the overall effectiveness of schools (A. Harris, 2001b). Hence, schools need to assess, design, and plan their own ways to create mechanisms for implementing their school improvement initiatives and measuring their impact on students' performance, argue Creemers et al. (2007). In order to do that, schools need a mix of measures to identify and monitor improvement in the classroom, as well improvement in school processes and in the school outcomes that are linked

with the school goals (Potter et al., 2002). But as well, schools need a climate that is open to the notion of change and improvement, an aspect that will be discussed further in Section 3.10.

### **3.5 School Capacity Building and Sustainable Improvement**

There are many definitions of sustainability across the globe, but within these are some common features. The Australian Research Institute in Education for Sustainability discusses the definition of sustainable development as being that which "meets the needs of the present without compromising the ability of future generations to meet their own needs" (2009, p. 2). This definition is congruent with the one developed by Hargreaves and Fink who argue that: "sustainability does not simply mean whether something can last. It addresses how particular initiatives can be developed without compromising the development of others in the surrounding environment, now and in the future" (2003, p. 3). Sustainability is seen as continuous improvement, as an ongoing "learning by doing" that actively involves teachers, students and parents to understand the reason for the change and to commit to the improvement (Australian Research Institute in Education for Sustainability, 2009). Capacity building, on the other hand, is more than school improvement: According to Crowther (2011, p. 6) "capacity building is the internal process of mobilizing a school's resources in order to enhance priority outcomes and sustain those improved outcomes". Harris and Lambert (2003) explain that school capacity building is concerned with providing opportunities for teachers to work collaboratively in new ways, arguing that schools that build the capacity for improvement and implementing change are more likely to sustain improvement over time. Schools that have built capacity and capability are willing and

ready to change, having developed within leaders the ability to manage the change process needed to effect improved students' outcomes Fullan (1985) argues. In this conceptualisation, the ultimate goal for school improvement is not just to implement the needed improvement initiatives, but rather to build the capacity that secures long-lasting effects on students' outcomes. From Ministry experience in Bahrain, it seems that the high performance schools are adaptive to change, with their teachers having a clear sense of the reasons for improvement. Teachers at such schools demonstrate a willingness to change their practice in response to the outcomes of students' achievements, as well as considering work skills and knowledge requirements or future societal needs. The literature suggests that for schools to be adaptive and know what and how to change, not only do school principals need to have a school improvement model that is clear and useful (Novick, Kress, & Elias, 2002), but they also need to know how to sustain the improvement for enough time to see the impact on students' achievement (Fullan, 1985). According to Fullan (2001, cited in (Muijs et al., 2010)) there is a desire for educational reform voiced in many countries, a call for change that is guided by powerful ideas but shallow commitment, with little attention being paid to the building of capacity for implementation and sustained progress. As a result, school improvement reforms have failed in many countries, especially where governments have tried to do too much at once, layering many changes on top of one another and adopting new initiatives with little analysis of why this initiative is needed, or how it fits in with, or replaces, what is being practiced already. Indeed, often new initiatives in school reforms are adopted before teachers have had time to practice and see the benefit from the old ones (Muijs et al., 2010). That is the case when insufficient effort is being paid to create the conditions for building capacity within schools to accommodate such major changes. School capacity building is concerned with creating

the conditions and opportunities for working collaboratively to enhance learning. In this scenario school becomes a professional community where teachers participate in decision making, commit to the improvement, and take collective responsibility towards their learning and students' outcomes (A. Harris, 2001a). Nonetheless, the major challenge facing schools is not how to improve but how to sustain improvement (A. Harris & Lambert, 2003), and that cannot be done when there are key people in positions of power favouring the old style (Mertkan-Ozunlu & Thomson, 2009). School capacity building includes activities such as redesigning initial teacher education, preparing teachers and principals for change, and creating professional learning communities inside and outside the school (Fullan, 2000). Many studies, such as those conducted by Ortiz and Taylor (2009); Dinham and Crowther (2011); and Anderson and Kumari (2009); suggested that building school capacity is essential to support the implementation of school improvement initiatives and to sustain progress. Indeed it has been argued that sustainability will only occur when school development is the ultimate requirement, initiatives are implemented to develop its practices internally and there is both complete support and challenge externally (Fullan, 2000).

Sustainability in school improvement will also occur where the improvement fosters learning, is shared by all stakeholders and it is supported by sufficient resources (A. Hargreaves & Fink, 2003), and effective leadership. Dinham and Crowther (2011) suggest following a distributed leadership approach, identifying three categories of elements necessary for effective capacity building: Firstly, the tangible features such as teachers, school, students, school infrastructure and finance; secondly intangible features such as school environment, professional development, teaching and learning methods, and leadership and management; and thirdly the support the schools get from

MoE and government, which depends on the value placed on education by the decision makers.

*In summary*, successful school capacity building is achieved through developing professional teaching and learning methods, good use of all factors affecting learning and establishing professional learning communities to sustain school improvement and ensure learners maximise their potential as reflected in assessment outcomes. Many writers in the field, such as Scheerens et al., (2013) and Dinham (2005), indicated that involvement of stakeholders, the sharing of vision, mission, values, commitment, and the establishment of a learning community are vital factors in educational leadership effectiveness to achieve better school outcomes. The question of leadership for sustainable improvement is therefore an issue that warrants further attention and is discussed in Section 3.6 below, with Professional Learning Communities addressed in Section 3.8.

### **3.6 Leadership for Sustainable Improvement**

Good school leaders have a strong positive impact on students and school performance, Whelan argues (2009). As shown in the previous section, the role of the school principal in communicating the purpose of the improvement, outlining the expected outcomes, securing the needed resources for the change, and talking with teachers and parents about the change, were important in building school capacity (Berends, Bodilly, & Kirby, 2002). Dinham (2005) believes that effective principals must develop good relationships with all stakeholders, arguing that relationship management is more important than the technical aspects of management and administration.



There are plenty of definitions of leadership, leadership roles and leadership practices, almost all of which are associated with enhancing students' outcomes (Hopkins et al., 2014). Harris and Lambert (2003) indicate that leadership is about learning together, working collectively and collaboratively to enhance students' performance: Leadership involves generating ideas together, sharing visions, common values, and taking actions to implement the agreed plans, forming in effect a learning community in which learners maximise their skills and translate the vision into day-to-day work. In the learning community model the leadership manages teaching and learning effectively to ensure a high degree of consistency in quality teaching practices to enable each student to maximise their potential through becoming active learners (Hopkins et al., 2014). Dinham and Crowther (2011) suggest that a distributed leadership style is a key factor in school capacity building. Similarly, Alma Harris and Lambert argue that effective leaders know how to generate and share knowledge with the school community, and create opportunities for others to take leadership roles and share responsibilities for the change (2003). Similarly, Whelan argues that good school leaders have a strong positive impact on students and school performance (2009). A highly motivated and committed leader seeks to work more efficiently and effectively, and this type of leader is one of the main elements required for school capacity building for sustaining school improvement (Mourshed et al., 2010; Wrigley, 2012).

As was shown in Section 3.1, the quality of schools depends significantly on the quality of teaching and the quality of learning. *In summary*, this section has shown that outstanding school leaders create a supportive and challenging school environment that enables students and teachers to perform well, one in which students and teachers stretch their abilities to the maximum, Whelan (2009) explains. As will be discussed

further in the next section, effective school leaders set high expectations and share a vision enabling all staff to take responsibility to achieve.

### *Effective School Leaders*

Building on what is known about organisational culture (Section 3.2), effective school leaders restructure the school environment to support students and teachers to learn continuously, motivating them to effectively use the available resources to plan and implement the required strategies for improvement. Such leaders also support teachers to plan for improving teaching and learning strategies, to facilitate a positive learning environment, and they hold teachers accountable for implementing the improvement initiatives, according to Whelan (2009). Therefore, it can be seen that in outstanding schools, teachers take leadership roles and share collective responsibility to improve and sustain school performance.

These findings about effective school improvement from highly performing schools are confirmed by studies conducted in other schools too: Barber and Mourshed (2007) and Dinham (2005), for example, found that school leadership is essential in improving the effectiveness of poorly performing schools. Supporting the notion that leadership is a key element, it was found that schools that had higher levels of implementation with regard to the school improvement initiatives and better student outcomes also had strong school leaders, unlike schools without strong school leaders (Desimone, 2002).

This finding is also congruent with an analysis of support provided in the study of the New American Schools in Berends et al.'s (2002) review of a decade of reforms in forty schools in the USA: This review indicated that school leadership was the most important indicator of the implementation level achieved in the school improvement process. Consequently, educational systems throughout the world are holding the

school leadership accountable for student performance, where student performance has become the key performance indicator used by many education policy makers (Heck & Hallinger, 2010).

The literature suggests that the role of educational leadership has changed significantly as greater demands are being made of the principal and the school (S. Lambert, 2011). Because of these increasing demands placed on principals, some writers argue that school change that leads to deep learning is almost impossible to sustain over time, posing as well challenges for policy-makers (A. Hargreaves & Fink, 2003). Sustainable change requires a school leader who is able to affect the academic students' outcomes indirectly, building the school's professional capacity, and focusing on teaching and learning. Sustainable change needs a reconceptualization of the role of school principals, enabling them to distribute their authority and power among teachers, building capacity for improvement to facilitate the changes to teaching practice needed to enhance students' learning (Heck & Hallinger, 2010).

However, ensuring that every school has the effective leadership required for the improvement of schools requires leadership at government level as well, both policy guidance and practical support. Three things are required from leaders at governmental levels: selecting and promoting the right people to become school leaders, creating the right professional development programme to enhance leadership practices (discussed further in the following Section 3.7), and providing support and guidance to all schools but especially to those performing less well (Whelan, 2009).

### *Distributed School Leadership*

In successfully implemented sustainable change, where the principal leaves the school, the good practice stays and the improvement initiatives do not disappear, Hargreaves

and Fink (2003), and also Lambert (2003) argue. By building leadership capacity across and within the school, the school community can lead itself and sustain the effort even if one or more of the key individuals leave (A. Harris & Lambert, 2003). Distributed leadership can be implemented as part of the improvement initiative to avoid leadership burn out, support deep learning and to ensure that the school improvement initiatives will last over time, even after the initiating principal themselves has left the school (A. Hargreaves & Fink, 2003). In this distributed leadership model, school leaders and teachers not only participate, but collectively take the responsibility for the improvement (Fullan, 2014).

*In summary*, leadership involves the valuing of all stakeholders' voices to improve school performance. It requires collective activities, shared goals and collaborative effort to reach the school's destination. Leaders are required to distribute power and authority and therefore the main concept underpinning distributed leadership is that every member of the school community can lead in a supportive context. (A. Harris & Lambert, 2003). Desimone found that the schools that experienced greater implementation success were the schools where teachers took roles in leading the improvement (2002).

#### *Principals as Instructional Leaders*

When the school principal succeeds in involving almost all teachers, the majority of parents and the students in leadership of the project, then the school will most likely develop a "high leadership capacity that achieves high student performance," according to Lambert (2003, p. 4). This link between school leadership and students' outcomes is also supported by Hopkins et al., (2014). Indeed, learning is seen as the core activity for school leadership capacity building and it is the key to developing professional

learning communities (A. Harris & Lambert, 2003). This approach is termed instructional leadership, where the principal, spends more time on tasks related directly to improving students' achievement than administration (Barber & Mourshed, 2007), including conducting formal and informal class observation visits. During class observation visits school leaders observe and improve the teachers' performance, monitor the implementation of daily plans, establish an educational channel with teachers, develop standards in assessment of the students, and provide a process of self-evaluation (Zendeli, 2011). Thus, not only do the school leaders themselves lead the learning, they work with their staff to ensure that learning is the core work of the school (Fullan, 2014). A successful school leader is therefore someone who is both confident enough to introduce sound management practices as well as having the capabilities to engage themselves and others in the enhancement of teaching and learning in their schools (Hallinger & Murphy, 2013). It is believed that most school leaders want to engage in the improvement of teaching and learning in their schools, but what stops them from achieving this aim is often cited as their involvement in day-to-day management tasks. The tension of responding to urgent managerial issues raised by students, teachers, parents, as well as urgent and unexpected meetings at the MoE hinders principals from observing learning inside classes and focusing on school improvement (op. cit.). Class observation visits require time for the preparation, time for class visits, and time to implement the professional development needed to support change. Waters, Marzano, and McNulty (2003) confirm the significance of the role of the leadership, especially instructional leadership, as one of the characteristics found in successful schools. Maximising the impact of the instructional leadership can occur by making leaning more important and improving the professional development of teachers as a group (Fullan, 2014). However, Waters et al., (2003) indicate that whilst

there are many theories underpinning the concept of instructional leadership, in general the literature fails to provide school leaders with practical guidance for becoming effective leaders.

*In summary* it can be seen that successful schools have high leadership capacity, which enables collaboration among all stakeholders to take leadership roles in the school improvement and learning enhancement. Successful schools are those where teachers have developed effective leadership skills and have a clear instructional focus in their roles and responsibilities, to enhance students' outcomes (A. Harris & Lambert, 2003). In the most successful schools. teachers are given the opportunity to become leaders in one area of the improvement system (Barber & Mourshed, 2007), and duties are managed and shared between teachers and the school principal (Zendeli, 2011). Successful schools are those where the focus is on both students and teacher learning, where each staff member takes a personal and a collective responsibility to improve students' achievement, and above all where the school principal believes that every stakeholder has the "right, responsibility and capability to work as a leader" (A Harris, 2003, p.4). Because of its vital importance to successful school improvement and sustainable change, the issue of teachers as leaders is further elaborated in the next section.

### *Teacher Leaders*

Teachers' role in the process of improvement is essential because the improvement happens normally in their classrooms and daily practices. For effective school improvement, individual teacher effort is not enough to maintain the impact on students' achievement as teachers change their positions, or leave the school. The school community needs to work collectively to achieve major changes in school practices and

to sustain the improvement (Creemers & Kyriakides, 2008). Therefore, teacher leadership is essential to develop high quality learning and teaching across the whole school (A. Harris & Lambert, 2003). Similarly, Muijs, Chapman, and Armstrong also identify the link of teacher leadership with the notion of distributed leadership (2013). Three roles for the teacher leaders have been identified by Alma Harris and Lambert (2003): firstly to enhance students' outcomes through improving teaching practices; secondly, to build collaborative professional communities – through coaching, mentoring, and leading other teachers; and thirdly, by setting the operational tasks for improving the teaching and learning methods. Teacher leaders can be involved in collecting the students' achievement data, analysing and interpreting it and then using it for improvement by building action plans towards enhanced students' learning and achievement (Fullan, 2000), and in this way, teacher leadership can be the driver to achieve better measurable results for students (Fullan, 2011). However, assigning leadership roles and responsibilities to teachers does not mean giving them more work to do. It means giving teachers the authority and autonomy to take decisions within their scope of work so they can make the decisions that might enhance student learning and outcomes (A. Harris, 2001b; McInerney et al., 2006). That this approach is successful is shown by studies in school improvement, such as those by Hopkins et al. (1999), Potter et al. (2002) and Harris (2001b), which show that teachers' participation in taking decisions regarding improving their school is essential to ensure teachers' support and acceptance (Desimone, 2002).

*In summary* it can be seen that effective leadership involves the valuing of all stakeholders' voices to improve school performance. It requires collective activities, shared goals and collaborative effort to reach the school's destination. However, the ability of teachers to participate fully in learning communities and to take on board the

opportunities offered in the distributive leadership model needs to be developed through appropriate professional learning programmes, as outlined in the next section (Section 3.7).

### **3.7 Professional Development**

The previous section showed that to lead effectively, school leaders need to understand human nature as so much of what happens in school and learning depends on commitment, collaboration, and common goals. For this reason, Zendeli (2011) argues that principals need to be trained in managing human resources. One of the most important human resource management strategies is the provision of effective professional development for teachers, as this is crucial to student learning. However, the best performing education systems have human resource strategies for effective recruitment as a starting point, attracting capable people into the teaching profession to enhance students' achievement. They do that by selecting the right applicant to be a teacher, and paying good compensation while studying. In addition, providing in-service training and coaching is essential to support teachers in their ongoing professional development. Capacity building needs to include training teachers in how to coach their peers, how to give peer reviews from classroom observation and then how to give feedback (Barber & Mourshed, 2007).

High performance schools ensure that every student benefits from the methods of teaching and learning, setting high expectations for what each student can achieve, and measuring that student's performance against the expected learning objectives, as well as looking at how each year cohort measures up against national and international benchmarks. Therefore, it can be seen that the changes required for sustainable school



improvement are complex and involve both individual and school learning (Howard, 2009). In the context of school improvement, teachers need to change their role from teaching to facilitating (Schoening, 1998), a major change that requires a movement from teacher-centred approaches towards student-centred approaches (Mertkan-Ozunlu & Thomson, 2009). This move in effect requires a different school culture. To be effectively implemented learner and learning-centered approaches may require external support to bring about the needed changes. To ensure sustainable best practice schools must provide support and guidance, and share ideas and plans with teachers (Fullan, 1985).

The amount of development required of the teacher to become an effective part of the school improvement team depends on the extent of the learning and development needed for students to attain the targeted outcomes. The school leader's role is to facilitate teacher growth, which indirectly affects students' growth and learning (Leithwood & Montgomery, 1982). Therefore, it is necessary to design stimulating, practical, and effective professional development programmes (Vandenberghe, 2002). There are a number of different techniques and approaches being used to effectively improve the teaching profession, such as providing practical examples during training, supporting teachers inside schools by a subject supervisor, and facilitating the school environment for teachers to work collaboratively and to learn from each other (Barber & Mourshed, 2007; Cordingley et al., 2015). The use of practice monitoring, evaluation, and feedback from an external support team has also been found to improve the implementation of school improvement projects, according to Desimone (2002) and Cordingley et al., (2015). Ideally, education reforms start by setting high expectations of what individual students can achieve and what it is expected that schools can do (Barber & Mourshed, 2007), and this needs to trickle down to what individual teachers

are expected to change with regard to the teaching process and their classroom practices. However, Vandenberghe (2002) suggests that changing teaching practices inside classrooms is complex and it requires effective use of teaching and learning methods, accurate assessment procedures and, above all, changes in teachers', students', and parents' behaviours. Teacher professional development needs to be linked with their needs (Zendeli, 2011), to be ongoing, and of high quality (Desimone, 2002), and to be monitored, measuring the impact of it on students' achievements (Barber & Mourshed, 2007; Timperley, Wilson, Barrar, & Fung, 2007). There are many studies of the effectiveness of teachers' professional development programmes that suggest that they are often ineffectual, in that there is little change observed of teachers' practice inside classrooms. Consequently it is recommended by Vandenberghe (2002) that, rather than policy-makers shaping the teaching practice, it is advisable that teachers shape the policy. This approach involves teachers changing their practice, measuring the impact, and then transferring the good practice across their school and, by governments identifying and sharing best practice, across the nation.

Indeed Fullan and Langworthy (2013) believe that the quality of teaching is the main and most important factor in a school that shapes learning outcomes. Teacher professional development programmes need to ensure all students can benefit from high-quality teaching and therefore access outstanding learning (Timperley et al., 2007). The quality of teaching depends on the appropriate application of skills, a sound foundation of subject knowledge and understanding of different pedagogical models or philosophies that impact on the way students are learning in the classroom as well as educating themselves in other formal and informal learning contexts (Hopkins & Stern, 1996). To achieve quality of learning there is a need to differentiate the professional development support provided to teachers and deliver each strategy according to

teachers' needs, with effective teachers being given autonomy to innovate and experiment, whilst weaker ones require very specific guidelines, so that they do not put learners at risk. This differentiated approach is supported by Desimone (2002) and Hopkins and Stern (1996), who identify effective teachers as those who know their students, have a knowledge of curriculum content, understand and practice a diversity of teaching and learning methods, and are able to utilise the skills, knowledge and understanding of their students to stimulate their learning.

There is a strong evidence showing the link between new methods of teaching and learning and deep learning (Fullan & Langworthy, 2013). However, there are challenges that hinder the implementation of effective professional development for teachers and reduce its impact on students' learning. A major challenge is teacher workload, identified in case-studies conducted by Bodilly and Berends (1999, as cited in Desimone, 2002), in which it was revealed that new methods of teaching and learning were not implemented due to pressure in preparing and drilling for high performance in national and international tests. These tests were given priority focus by teachers because these results were the main measures of the performance that the general public and ministries around the world use to make judgments about teacher quality and school effectiveness. Another factor in teachers' difficulties using the new teaching and learning methods and implementing them effectively that Dello-Iacovo (2009) observed in many schools was that, given today's more global labour market, they came from different nations using different teaching and learning methods, and received little preparation time to adjust to a new school culture.

Therefore, to facilitate effective professional development programmes, the most important first step is to identify what teaching and learning methods will foster deeper learning outcomes, establish how teachers can be effectively supported and guided in

their implementation of innovative new approaches, and identify how teachers can be supported within a subject to enhance school improvement (Vandenberghe, 2002).

*To sum up*, teacher professional development programmes need to ensure all students have access to outstanding learning and can benefit from high-quality teaching. These professional development programmes can be supported by external support and through close monitoring of their performance against expected practice, a point picked up again in Section 3.9. Within the school support system, mentoring and coaching through the adoption of a professional community of learners approach can also be effective, and the next Section 3.8 discusses this in more detail.

### **3.8 Professional Learning Communities**

In the preceding sections that focused on learning (Section 3.6), and professional development (Section 3.7), the professional learning communities model was seen as central for sustainable development. Here the major responsibility of principals was established as learning, as instructional leaders, making learning the centre of their everyday work, directing everything they do in school toward supporting student learning (A. Hargreaves & Fink, 2003; Muijs et al., 2013). The contention is that if a community of learners approach is adopted, the school principal as instructional leader, is able to successfully manage change, moving all the stakeholders and the school forward, leading learning, and contributing to school improvement (Fullan, 2014).

Professional learning communities are advocated because they create an organisational environment for professional development (Lassonde, Israel, & Almasi, 2009), enabling teachers to share knowledge, materials and good practice, supporting one

another as they learn together and reflect on their teaching practice (Barber & Mourshed, 2007). In professional learning communities, teachers actively participate in groups with peers sharing purpose, supporting the school to build its capacity and produce successful learning outcomes for all students. Professional learning communities can be used as a tool to enhance learning, develop teacher leadership, build school capacity, and enhance student learning outcomes (Humada-Ludeke, 2013).

Since 1990 it has been suggested that creating a professional learning community in the school or making the school as a learning community are useful ways to improve schools (A. Harris & Lambert, 2003), as they enhance the capacity of both schools and individual teachers (Stoll et al., 2003a). Building professional learning communities is considered as vital for teacher professional development, school improvement projects and improving students outcomes (A. Harris & Lambert, 2003). For a number of years, professional learning communities have had a place in school improvement initiatives (Groundwater-Smith & Mockler, 2009). What works in school improvement is the daily experience of all teachers collaboratively sharing in a purposeful profession that effectively addresses their needs and enhances their practices (Fullan, 2011). The purpose of professional learning communities is to support the building of the school's capacity for a sustainable improvement cycle that enhances students' learning (Stoll et al., 2003b), and continues learning and development for teachers as leaders (Humada-Ludeke, 2013). Professional learning communities provide learning that is generated by active participation and engagement in the work to construct ideas and knowledge that can be shared (Wenger, 1999). Rather than using a top-down method, as from the school leader to the teacher, it might be more acceptable to have the improvement strategies introduced by their peers. In this approach teachers have the opportunity to collaborate in a safe environment, locally within a school, or cooperating with other

schools, where no authoritative force is being used, such as the authority of the school principal (Desimone, 2002).

Although it appears there is limited evidence that professional learning communities or school collaboration have a positive impact on students' learning (Armstrong, 2015; Stoll et al., 2003a), students' learning is the main focus of teachers in such learning communities. The more successful a professional learning community is to be, the more it will be associated with a positive impact on students' achievement and professional development (Stoll et al., 2003b). Fullan (2000) found that the more successful schools are those which form a professional learning community, have a focus on student learning, and change their teaching and learning methods to get better results. Professional learning communities build teachers' commitment and develop the capacity to learn and sustain improvement over time (A. Harris & Lambert, 2003). However, the arguments for implementing the professional learning community models inside schools appear to be based on the nature of the teaching profession, rather than on a solid research foundation. Whilst other professionals in society generally work as teams, teachers work almost alone inside classes. Therefore, by providing the opportunity through professional learning communities for teachers to share ideas and their knowledge of successful practice, and enabling them to learn from others by observing their classes, is thought to be able to enhance students' learning (Barber & Mourshed, 2007). Moreover, professional learning communities can be seen as purposeful arrangements for teachers to be together to examine their practice and plan for developing their professional practice and improving school performance in a collective and collaborative way (Groundwater-Smith & Mockler, 2009). Desimone (2002) also argues that traditional professional development is not enough to enhance teachers' practice, suggesting the need for teachers to be effectively involved in

professional learning communities to interact with other teachers and to share practical solutions for some of the problems that they might face. Teachers develop practices to deal with their environment and facilitate ways to get better results for their schools and others as well (Stoll et al., 2003b), and so professional learning communities are considered to be a key factor for sustaining improvement practices in schools (Novick et al., 2002). As sustainable improvement can no longer be dependent on the capabilities of one person, schools need to build purposeful professional learning communities to support school leadership, professional development, and enhance students' outcomes (A. Harris & Lambert, 2003). In addition, professional learning communities identify the best practices, which can then be shared with the other teachers in other schools (Barber & Mourshed, 2007), and this is a good investment in teachers' professional development (Stoll et al., 2003b).

To build professional learning communities there are conditions that need to be established within schools in order to be able to apply the reflection and critique so necessary for improvement (Groundwater-Smith & Mockler, 2009). An effective professional learning community has a number of characteristics, some of which are: a shared vision; collective responsibility for students' learning; a focus on learning; reflective professional enquiry' and openness, respect and support (Stoll et al., 2003b), as well as a high level of trust and a focus on professional learning (Copland, 2003). The creation of professional learning communities involves a paradigm shift, from a 'solo' mentality where each teacher works alone, towards a culture of collaboration, which requires collaborative, purposeful work, transparency, tolerance, shared practices, and the valuing of continuous learning (Humada-Ludeke, 2013).

### *Collaborative Culture*

Fullan (2011) believes that the heart of school improvement is teacher professional development, which is linked to student learning. One way of progressing school improvement is by fostering collaborative cultures as essential environments for developing all teachers. In collaborative school cultures teachers participate in teams, exchange ideas and share reflection in order to improve their individual and other practice (Hopkins & Stern, 1996). Collaboration can provide social support for reflection and opportunities for teachers of differing levels of performance to learn from peers. Collaboration is not only sharing ideas and practice, it is also a way of reinforcing one's knowledge and understanding through defending and explaining one's ideas to a group of peers (Newell, 1996). Successful schools provide teachers with opportunities for collaborative work to learn together, encourage the sharing of ideas, practices, opinions and experiences and through this process teachers reflect, enquire and collaborate, which builds the capacity for school improvement (A. Harris & Lambert, 2003). By reflecting on their work, teachers investigate and think critically about their teaching (Newell, 1996), reflecting dissatisfaction with their own practice (Hopkins & Stern, 1996). In the process of collaboration with their peers, who have different experiences and teach different academic subject areas (Newell, 1996), regular opportunities are provided for teachers to share their new practices and solve their problems. Working collaboratively as a part of an effective professional development community helps focus attention on shared objectives that lead to school improvement, as professional development is a continuous learning process focused on making a difference in all students learning (A. Harris & Lambert, 2003). Teachers might learn new things from other teachers sharing successful practices with them, but whether they are capable of implementing them inside their own classrooms or in their schools, is another issue. Teachers are expected to acquire new skills and knowledge to be effective



experts in teaching and learning, to collaborate, and to embark on a journey of continuous learning for themselves, towards school improvement. This requires teachers to be committed to enhancing their practices and to be skilled in their subject areas (Fullan, 1995). This will not happen unless teachers are effectively involved in professional learning communities, where their individual and collective learning is boosted, and their leadership and management skills are enhanced (Stoll et al., 2003b).

As with all aspects of school improvement and professional development in general, one of the most common statements made by teachers when professional learning communities are being created is that they do not have the time to commit to them. It is very true that teachers have heavy workloads and they are often preoccupied with many administrative and management responsibilities: "How can teachers possibly fit even one more task into their days?" ask Lassonde et al., (2009, p. 3), and Hargreaves queries how schools and classrooms can change to achieve such aims. Furthermore, some school reform initiatives discourage teachers from engaging in the process of professional learning communities, a problem exacerbated by the rapid turnover of school principals, and of school improvement project leaders as well, Hargreaves (1999) argues. Teachers and schools wishing to promote and sustain professional learning communities should monitor and evaluate the development of their practice and the implementation of the professional learning communities over time, and take the opportunity to minimize the obstacles they might face (Stoll et al., 2003b).

*To sum up*, although the concept is not underpinned by a huge body of research, being a relatively new idea, it appears that professional learning communities are well worth implementing in order to enhance school effectiveness, teacher performance and students' learning outcomes because they appear to help in building the school capacity for sustainable improvement. Professional learning communities can inspire teachers to

commit to the school improvement initiatives, to become part of it, and provide professional development.

### **3.9 External Support and Internal Improvement Teams**

The aim of school improvement is to ensure that learners get the opportunity to maximise their potential. As part of the strategies used to ensure all students can benefit from high-quality teaching, the last section outlined how, within the school, support, mentoring and coaching through the adoption of a professional community of learners' approach can be effective. School improvement initiatives can also be assisted by external support and through closer monitoring of their performance against expected practice. However, it is generally accepted that the best combination for sustainable school improvement is both support and performance monitoring.

#### *Judging School Performance*

There are many reasons for wanting to be able to judge school performance: Most countries are interested to know how well their education systems are performing and the impact of new education or school reforms on students' outcomes; Accountability requirements at government level are established to provide the raft of stakeholders with evidence of the value of the state's investment in education and, in today's tight financial times, the education spend is particularly under the radar. National monitoring of school outcomes ensures that the education system has the information it needs for intervention when a school starts to fail (Barber & Mourshed, 2007). School performance data, whether taken from student exam results or reviews of school

performance, can be used to provide judgements of school performance and to stimulate school improvement.

Schools want feedback on what is working well and what needs to be improved at their school and parents and students also want to know the performance level of their schools especially when it comes to making educational choices (Gorard, 2010). The school performance data that is generated by exams, not only informs parents to make choices about selecting schools and courses for their children, but is also used as evidence in the school review process. Inadequate school performance can lead to different types of actions being taken, from more recommendations for inclusion in school improvement planning, compulsions for the school to produce an action plan to mitigate these, and even service sanctions i.e. where the government may impose restrictions on an institution's activities including cessation of programmes or restrictions on enrolments. In spite of the widespread use of national or international exam results and the use of school performance review reports, measuring school performance is a complex concept and, as was indicated in Section 3.4, it is obvious that simply reporting student outcomes cannot be taken as a measure of school effectiveness: To describe a school as 'effective' implies that it has done something more than simply recruit able students who would have done well even if not taught well. Consequently, many schools described in the school effectiveness research made use of value-added models, such as Dumay, Coe, and Anumendem (2013) note. However, the questions remains, how can effectiveness or improvement be measured and what counts as evidence? (Aksit, 2007).

### *Measuring Improvement*

There are a number of different ways of judging school performance or monitoring the quality of teaching and learning, such as examinations and school performance inspections (Barber & Mourshed, 2007), student attendance, student enjoyment of learning, and the value added (Gorard, 2010). Examinations, for example, and particularly the standard national and internationally benchmarked ones, test students' knowledge, understanding, and skills, providing objective measures of actual outcomes (Barber & Mourshed, 2007). Countries like the USA and the UK have established policies to judge education outcomes based on test scores (Aksit, 2007). However, the performance of schools cannot be accurately assessed only in terms of the students' attainment in national or international exams (Gorard et al., 2013).

Unlike examinations, school reviews assess the performance of a school against a set of indicators or criteria. School inspections measure both student outcomes and the school processes, and provide critical reports identifying specific areas of strength and opportunities for improvement. School inspections also enable systems to measure some of the more complex desired outcomes of a school system, which are difficult or impossible to measure in examinations (Barber & Mourshed, 2007), such as support and guidance, leadership and management and the impact on students' progress. In New York, Qatar and Bahrain, all schools are to be reviewed by external reviewers in a cycle of time and performance reports are published for the public. Nevertheless, Barber and Mourshed (2007) argue that publishing performance reports will enhance the improvement of good schools further, though inadequate schools seldom improve for this reason alone.

Usually schools are made accountable for their students' achievement, on the assumption that they are responsible for the largest share of their students' academic achievement (Tortosa-Ausina, Thieme, & Jimenez, 2013). This approach also assumes that the underperforming schools are able to take actions to improve student performance (Anderson & Kumari, 2009). Some countries employ standardized test scores for holding schools accountable (Kupermintz, 2003), by what is seen as a rigorous external accountability system. Schools do best when they compare their performance against standards (Fullan, 2000), therefore, external accountability systems generate data for schools to know their level of performance so that they can improve them accordingly (Scheerens, Bosker, & Creemers, 2001). Mausethagen (2013) indicated that accountability has reduced the opportunities for teachers to develop caring relationships with their students and argued that the amount of time that teachers connect with students is reduced as a consequence. It seems that some forms of accountability shift schools from teaching for learning to teaching for testing.

### *Structures and Systems*

In many top-performing systems, responsibility for assuring the quality of performance is separated from the responsibility for improving the quality of the performance (Barber & Mourshed, 2007), so there is often an internal and external structure to assist school improvement. However, although it is known that one cannot improve what one does not measure, it is also believed that inaccurate performance indicators are misleading (Barber & Mourshed, 2007).

Both external and internal teams can be important in effective school improvement. The internal improvement team works as a group of critical friends who observe the school practice, facilitate reflections on school performance, ask questions, probe for

justification and evidence, measure the progress, provide support and guidance, and set up the school to meet accountability requirements (Sutherland, 2004). The improvement team acts like a critical friend in the sense of monitoring and evaluating the school's performance, challenging the school in its decisions, and putting pressure on the school to improve according to its staff's capability.

In contrast, the external team is responsible for ensuring good quality learning in the school (Barber et al., 1995), and in most countries this would either be from a government quality assurance agency (such as QQA in Bahrain) or an independent quality agency or accredited company. To build school capacity for sustainable improvement, a combination of monitoring and effective intervention is essential to ensure good learning is taking place across the school according to Barber and Mourshed (2007). A mentoring system is important to assist teachers in implementing the key components of the intervention (Aksit, 2007). It is clearly evidenced that initiatives initiated externally to the school can be more effectively implemented when it has got external support (Fullan, 1985). School improvement initiatives require significant effort in monitoring implementation, informing all the school stakeholders, linking multiple school improvement projects, and providing the necessary support to everyone to make the desired progress (Fullan & Miles, 1992). External support stimulates and reinforces improvement especially at the initiation stage (Fullan, 2007).

*To sum up*, the combination of pressure along with high support is essential (Fullan, 1985), whereas pressure without support leads to unwanted behaviours such as teaching to the test, and drilling students on examination questions (Barber & Mourshed, 2007). Several studies link the external support with school improvement (Fullan, 1985), but if a school does not know how to improve its performance, or how to build its capacity for improvement, then pressuring it will not lead to improve learning (Barber &

Mourshed, 2007). The purpose of the external support is not only to provide support and guidance, it is also to monitor the progress, judge the performance and plan for improvement.

### **3.10 Managing Change**

Change happens as a result of influencing both individuals and organisations, not only through creating new policies and procedures but also through development of personal strategies. The management of educational change is a rational task connecting the new improvement initiatives into the old practice so that what is required is done (Bennett, Crawford, & Riches, 1992). However, it is claimed that schools are being bombarded by change, whilst others say that there is nothing new. Policy makers claim that teachers are resistant to change and teachers complain that policy makers introduce change without knowing what really happens in schools. Parents are confused by new improvement initiatives and worried about the future opportunities for good jobs. Some parents insist on restructuring schools while others believe that core curriculum changes are needed (Fullan, 2007).

Education change must make sense. It is possible to be clear enough about what you want to achieve, or to be skilful about change management, but to lack the understanding of which changes are most needed, or the consequences of a particular change. Therefore, it is essential to know the specific consequences of educational change, and the process of involving all kinds of individuals, schools, and ministries that work in interactive ways. It is how all the above are involved in change, what is need to be changed, and how it can be best accomplished. To make changes that matter in students' lives is the moral purpose of schools (Fullan, 2007). However, change fails

and school improvements are not sustained when the infrastructure is weak, that is when teachers are working in a negative school culture, or in countries where the state is not helping to sustain reform. According to Fullan (2007, p. 13) "The problem is not the absence of innovation in schools, but rather the presence of too many disconnected, episodic, fragmented, superficially adorned projects". Some change efforts are successful while others are failures, but the lessons learned from the successful stories in business sectors are that the change process goes through a series of phases and requires a considerable length of time, according to Kotter (2007). A study of school reform conducted by Desimone (2002) indicated that change in the education sector is similarly a slow process that takes anywhere from between five to ten years for the impact to be observed on students' outcomes. Desimone concluded that, as it may take many years for a school improvement model or project to be implemented and for its effect to be seen, the slow pace of school improvement reform affects the ability to assess the implementation and to measure the effects on teachers' and students' learning (ibid.). But how is such change achieved? Kotter identified that there were eight steps that needed to be taken for sustainable change in organisations of any kind:

- 1) Establishing a sense of urgency,
- 2) forming a powerful guiding coalition,
- 3) creating a vision,
- 4) communicating the vision,
- 5) empowering others to act on the vision,
- 6) planning for and creating short-term wins,
- 7) consolidating improvements and producing still more change, and



8) institutionalizing new approaches (2007).

On the other hand, Fullan's work with schools identified that the change process has three phases: phase 1: is the initiation which it includes the decision to proceed with a change. Phase 2 is implementation, which involves the first experiences of implementation. Phase 3 is the continuation which refers to whether the change is built into the school system or disappears by any decision (2007). These models, although derived from different sectors, have much in common, particularly in the emphasis on how to begin the change process, gaining commitment through creating a sense of urgency, and in sustainability, with reflection and the identification for further improvements.

### **3.11 Conclusion**

This chapter highlighted the importance of school culture in organisational change. The creation of a positive ethos for school change is critical in order to improve its effectiveness. To improve the culture of a school requires development of a shared vision and high levels of commitment by all stakeholders. However, governments, educationalists and parents need to understand that the absolute goal of any school reform should be to improve students' achievement. It is clear from this literature review, that unless there is real progress in students' learning, no school improvement effort can be considered successful.

One of the elements identified as critical to sustainable school improvement then, was effective leadership: Principals who set high expectations for students and staff, facilitating a supportive school environment to enable the school community to achieve

targeted goals, who manage teaching and learning and put in place improvement initiatives to ensure continued educational quality can be considered as effective leaders. Such leaders involve all stakeholders, creating an awareness and understanding of the urgency of change and reasons for the improvement, as well as providing the resources required, as well as the needed support. The complexity of the school principal's role in building leadership capacity in others is a very large topic that, while beyond the scope of this review, is reflected in consistent recommendations for schools to become learning communities. However, it is clear that the concept of leadership and its effectiveness is central to improving schools. School principals develop sustainability by reinforcing the commitment of their staff and enhancing deep learning aspects that warrant further attention in Chapter Four, as well as ensuring school improvement initiatives will last over time, putting in place succession planning to facilitate continuity after they leave.

Thus, the literature review has identified the key elements for developing a conceptual framework for this study that explores the meaning of and the strategies involved in building school capacity for improvement and these are shown in Figure 3.9.

School reform initiatives round the world have been implemented in the belief that education is the key for global productivity. To achieve the re-culturing necessary for sustainable change the literature indicated that all stakeholders must ideally be involved in the reform. The literature also showed that this is not an easy task, as policy makers, school leaders and researchers have different approaches for improving students' learning outcomes. The other dimension in building school capacity for improvement is the collaboration between the school improvement and school effectiveness models to link the teaching and learning process to the students' outcomes. Successful schools have high leadership capacity, enabling collaboration amongst all stakeholders to take

leadership roles in the school improvement process and in learning enhancement for all students. Professional development is another area that the literature review showed was central with successful schools providing teachers with opportunities for collaborative work to learn together and undergo effective professional development. The external and internal teams and their impact on students' outcomes were also shown to be important in effective school improvement.

*Figure 3.9: The Key Elements for Developing a Conceptual Framework for School Improvement*

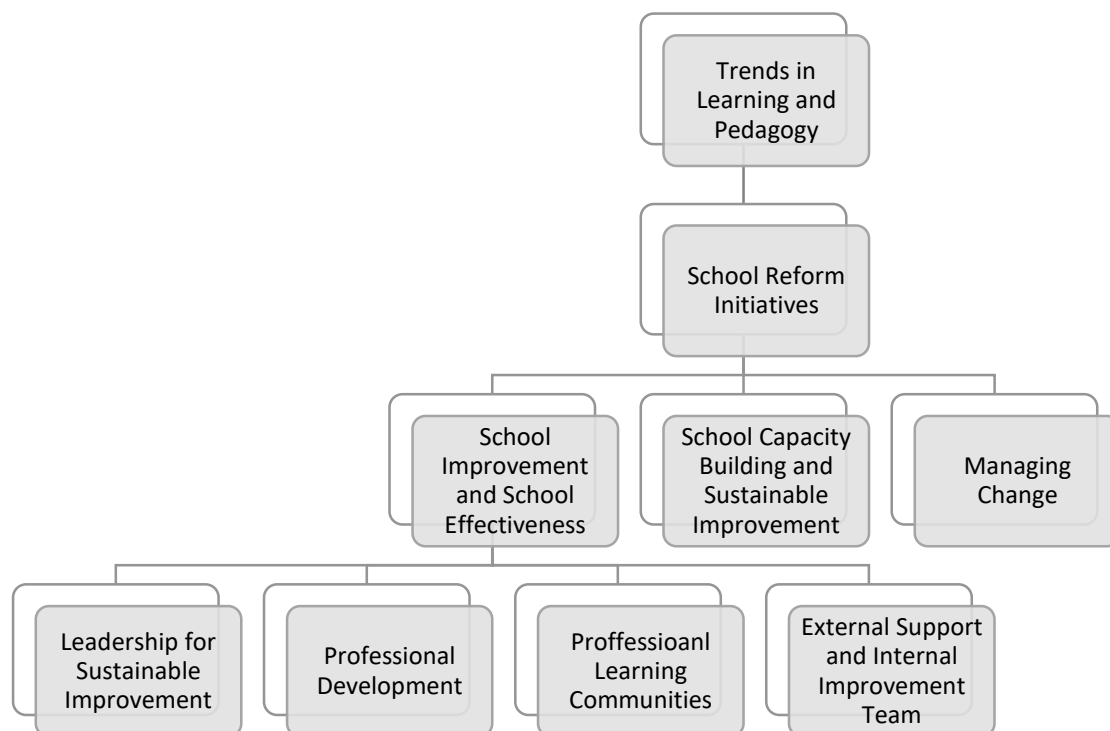


Figure 3.9 is a summary that shows the key elements for developing a conceptual framework for school improvement, as derived from the overview of the literature. These are the key elements that should be considered in the development of any model to improve schools in general. However, there was little about how to implement the

change, apart from identifying the steps. Similarly, there was little published about school improvement in the Middle East, though the cultural context was acknowledged as very important. Therefore, this case-study was initiated to contribute to filling this gap about school improvement in the Middle East.

How to make the school improvement initiatives in the MoE in the KoB more successful was the driving question that initiated this study.

However, in order to answer this question a sub-set of questions was developed to guide the investigation:

- What is needed for school improvement to become sustainable school success?
- How does school capacity building as a process help in building and sustaining school improvement and learner achievement?
- What type of leadership ensures building and sustaining school success?
- What is the effect of school capacity building on students' academic achievement?

## **Chapter Four: School Capacity Building for Sustainable Improvement (SCBSI) Model**

### **Introduction**

Based on a desire to lift the quality and performance of education, Bahrain took the initiative to create an independent quality assurance authority to ensure that the quality of education and training in Bahrain meets international standards and best practice. In parallel, MoE designed the School Improvement Project (SIP) to enhance the performance of government schools and improve future career outcomes for students. Although these reform initiatives had been in place since 2008, there was little evidence of progress. To the contrary, students' overall performance in National Examinations appeared to indicate a dramatic deterioration since 2011, and Bahrain's TIMSS scores continued to be below the participating countries average TIMSS results.

To make the school improvement initiative in the MoE in the KoB more successful was the aim of conducting this research. Based on a widely held belief that the key to global productivity lies in a skilled workforce, the literature provided plenty of models and strategies designed to bridge the gap in students' achievements through school improvement initiatives. As the preceding chapter (Chapter 3) showed, there had been considerable research exploring how to improve a single school, but less on how improvement initiatives had been sustained within a school or across a country. What literature there was seemed to suggest that schools that build capacity for improvement and implement the changes identified over ongoing review cycles were more likely to sustain improvement over time (A. Harris & Lambert, 2003).

The School Capacity Building for Sustainable Improvement (SCBSI) model was developed by the researcher in the role of Cluster Team member in four Bahrain primary schools with the goal of achieving greater and sustainable improvements. The SCBSI model (See Figure 4.16) consists of six elements that arose from literature review in Chapter Three:

Element 1: Committing to school improvement to understand the needs and to build the culture to improve the school performance;

Element 2: School diagnosis and coherence to evaluate school practice and plan for improvement;

Element 3: High expectations to develop an image of the future that it is both optimistic and achievable;

Element 4: Deep learning where teachers engaged in some form of professional learning development programme to enhance their practice and focus on enhancing students' outcomes;

Element 5: Change reaction where teachers share their practices and enhance their collaborative working to adapt to the change; and finally

Element 6: Share success to identify the processes that have contributed to enhanced school outcomes and reinforce them in the school's work.

This chapter describes each of the six elements of the SCBSI, and the literature that justified their inclusion in the SCBSI model, providing the context for the research study that then followed.

## 4.1 Model Creation

Having reviewed the literature on school improvement, the current section proposes a model of what might work to make the school improvement initiatives in the MoE in the KoB more successful. The model is founded on the elements that were identified as needed for any school in the world to improve its practice, build its capacity for improvement and sustain that improvement. The model took as a starting point what seemed to work across different school improvement initiatives in different countries, as identified in the literature review. However, it was clear that what worked internationally might not work in Bahrain because school improvement models need to be context-specific and must be tailored to the unique circumstances of each school (Potter et al., 2002). Because the education system is very complex, and no two countries face exactly the same challenges, it is very difficult to implement ideas borrowed from elsewhere (Donn & AlManthri, 2010). Each school system starts from a different point, faces different challenges and expectations, and operates differently. Similarly time is also a factor, and what worked a few years ago might not have relevance today (Mourshed et al., 2010).

The first question that comes to mind when starting to try to improve school performance is 'what elements of current practice would need to be enhanced or changed, if a model were to have an effective impact on students' outcomes?' The difficulty in addressing this question arises because improving school performance is multidimensional, that is, more than one element of change needs to be integrated (Fullan, 1983). Despite this an international overview conducted by Mourshed et al. (2010) found that almost all countries had implemented the same set of interventions to improve their school systems, even though there were different cultural contexts, and

with different rationale for their initiation. This analysis of 20 school systems from all parts of the world involved almost 575 reform interventions in total, but in focusing on those that have achieved significant and sustained improvement, it was found that all improving school systems appear to adopt a similar set of interventions, although from different contexts (Mourshed et al., 2010), and these included professional development, school leadership, and student assessment.

Therefore, developing a suitable school improvement model and tailoring it according to the Bahrain context was the first step. However, the research in school improvement and school effectiveness tells us almost nothing about how a successful school achieves sustainable success and little about the process of change (Fullan, 1985). Neither do the school improvement models implemented in some countries tell us about why they work in that context. The issue of causality is difficult to be certain of, especially in the school context. Fullan identifies the key questions:

- How did an effective school get to be one?
- How did the elements of effective schools implement and progress in a particular school's context?
- Was one element initiated before the others? and
- How did these elements affect each other over a period of time? (1985).

Unless we identify exactly the elements that we need to help a school to improve, are able to show how to implement these elements, and above all demonstrate how these lead to improvement in students' outcomes, we cannot really claim that any improvement initiative is successful, Coe (2013) explains.

It is assumed that the overall objective of school improvement models is to improve students' academic achievement and/or enhance their personal development. To achieve



that objective, a school must engage in a process of improvement, with a focus on specific priorities and elements. Although all school improvement systems appear to adopt a similar set of interventions in different contexts (Mourshed et al., 2010), the process of change differs from country to country according to the schools' context. Hence, there is no one model that fits all countries. There are plenty of models and each identifies factors which, when they are implemented, influence the performance of a school. A classic example of this is provided by the Ontario Education Improvement Commission, which instigated a large-scale education improvement strategy over 5000 schools with the aim of making a difference for learners in the context of a demotivated teaching workforce and public dissatisfaction with Ontario's public education system. This initiative was successful because all schools were involved, developing collaboration between teachers, whilst resources were supplied in support. As a result, the Ontario Education Improvement Commission claims that student performance improves when teachers use teaching and learning methods that specifically address the needs of their students, when the school environment is positive, and when stakeholders are involved in the students' learning (2000). Mourshed et al., provide another model that presents steps to follow in order to improve the school system, beginning with the identification of the current situation of the school system (from the student achievement view point), identifying firstly the set of school improvement programmes and the system adaptation elements within its context, and then identifying the necessary conditions to support the system (2010).

A review of the literature concerning school effectiveness, school improvement, effective classrooms, and school leadership, indicates that many educationalists have contributed towards a more integrated understanding of how schools make a difference in learning (Heck and Hallinger 2010). However, as a Cluster Team Member within a

School Improvement initiative, it was difficult to identify the best models to use. To address this, the many different models of school improvement have been analysed and from this, the key elements to establish a relevant model for Bahrain are proposed.

Bosker and Scheerens (1994) reviewed different school effectiveness models and found that the School Effectiveness Models' are outcome-oriented models that contain school-level variables and share a common structure; i.e. input-process-outcome with multiple levels: pupil; classroom; teachers; and school. These models recognise causal chains, with one variable affecting others, though the specification of particular variables in the models varies according to the disciplinary specialisation of the model designer(s). In comprehensive school effectiveness models students are at the core of strategies designed to enhance effectiveness, so learner motivation, quality of instruction and instructional time are emphasised. The success of implementing comprehensive school effectiveness models is strongly dependent on conceptual clarity, but also on the time spent on the task, the focus on all disciplines, as well as the allocation of resources. The most important variables in comprehensive school effectiveness models were identified as attainment scores and student motivation to learn (at pupil level), teaching quality, a shared achievement-oriented mission, coordination among sub-units, evaluation practices, quality of allocation of teachers, and a stimulating school environment. These factors are equally important where partial effectiveness models are implemented, focusing on a single area identified as the focus for improvement.

*In summary:* The review of the literature concerning school effectiveness, school improvement, effective classrooms, and school leadership indicated that many diverse schools of thought have contributed towards the debate about how schools make a difference in learning. However, these different strands in the literature were not integrated and so, as a Cluster Team member within a School Improvement initiative,

it was difficult to gain a comprehensive overview of which approach and which factors were critical. To gain a better understanding and integrate the accumulated learning within the literature, the many different models of school improvement have been analysed and from this, a categorisation of six different types of models emerged, based on their common structures and different approaches.

- Multi-Level models,
- Evaluation-Based model,
- Steps/Principles models,
- Professional Development models,
- Holistic School Reform models,
- Sustained Capacity models.

Each of these will now be outlined in turn and, while some are old and probably not applicable to today's students' needs, they have been included for completeness.

#### *Multi-Level Models:*

#### *Alternative Interpretations of Cross-Level Facilitation*

The multi-level model is, according to Bosker and Scheerens (1994), premised firstly, on the belief that the higher-level variables facilitate lower-level variables in the production of education outcomes. Those who advocate for this model of school improvement predict that, should a school have a majority of effective teachers and sufficient feedback among the staff, the minority of less effective teachers will be stimulated to become more effective. This mechanism works against improving education by selecting effective teachers, where the distribution of teachers is the authority within the MoE, and schools can be partially participative in the selection.

The second principle underpinning this model is that higher levels can act as mirrors to conditions at lower levels, with classroom effectiveness harmonizing with school effectiveness: Features like high expectations of students' achievement have been seen in effective classrooms as well as effective schools.

Thirdly, higher levels can be thought of as *overt measures* creating effectiveness-enhancing conditions at lower levels: The concept of instructional leadership comes under this heading.

Fourthly, conditions at higher levels can serve as *incentives* to promote efficiency-enhancing conditions at lower levels, such as rewards for teachers from their superiors for effective teaching if schools reach certain achievement standards.

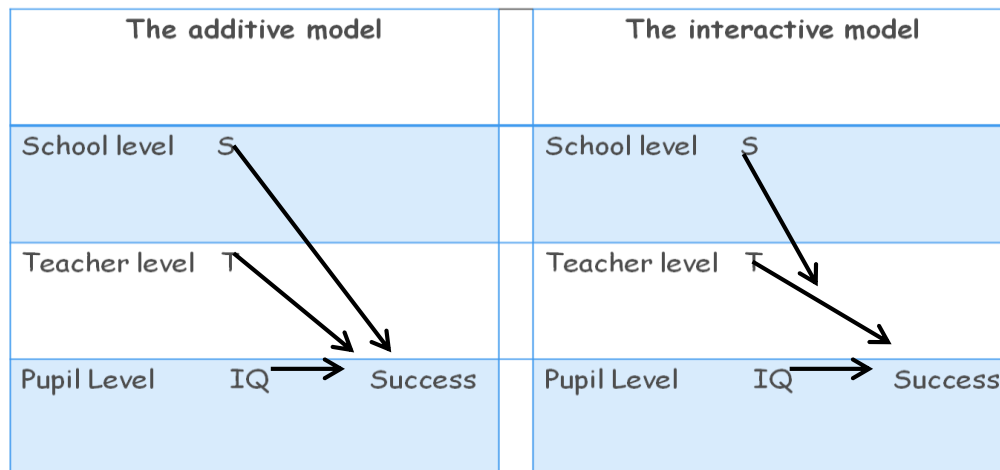
The fifth principle is that conditions at higher levels can serve as material facilities for conditions at lower levels, an example being the implementation of a computerized, school-monitoring system at school level to provide teachers with a more sophisticated means of monitoring student progress.

Sixth, and finally, higher level conditions may serve as *buffers* to protect efficiency-enhancing conditions at lower levels, like coping with governmental regulations.

Examples of multi-level models:

**a) Additive vs. interactive models**

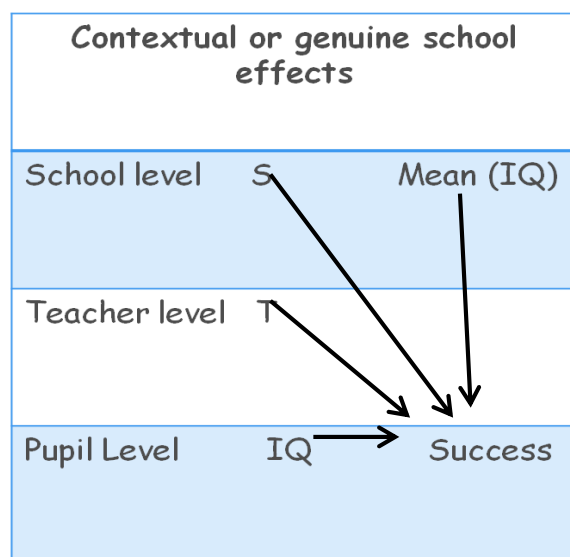
*Figure 4.10: Additive vs. Interactive Models*



Bosker and Scheerens (1994) reported that high-achieving students especially benefited from the amount of curricular content covered, concluding that this ‘additive model’ is scientifically more powerful, being more economical than the interactive model.

**b) Contextual vs. "genuine" multi-level effects**

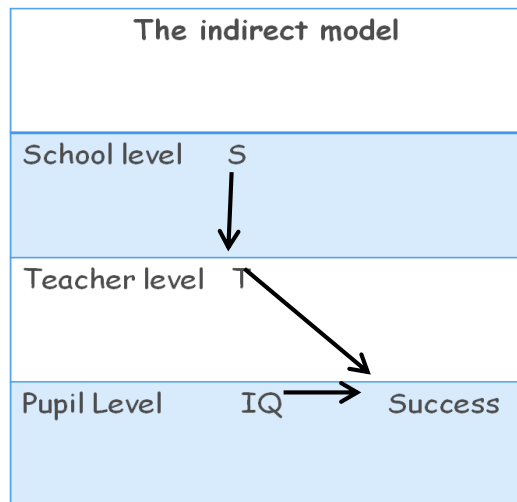
*Figure 4.11: Contextual vs. "Genuine" Multi-level Effects Models*



**c) Indirect vs. direct causal effects**

Conditions that are "more than one level up" with respect to educational achievement can either be seen as direct causes of achievement or as indirectly influencing achievement via intermediate levels (Bosker and Scheerens 1994).

*Figure 4.12: Indirect Model*

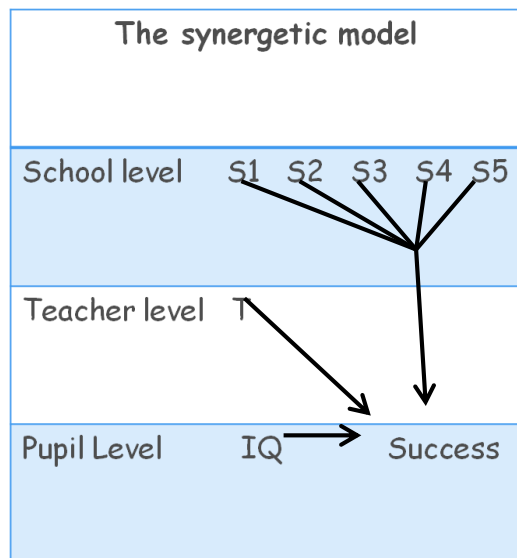


Experimental evidence was found for the hypothesis that in more heterogeneous groups pupils achieve less because they get less attention from the teacher (Bosker and Scheerens 1994).

**d) Additive vs. synergetic interpretations**

In research practice, one therefore constructs ideal types, by means of cluster analysis on the school level predictor variables. The cluster analysis then searches for groups of schools that are as different from each other as possible, while within each group the schools are as much alike as possible (Bosker and Scheerens 1994).

*Figure 4.13: The Synergetic Model*

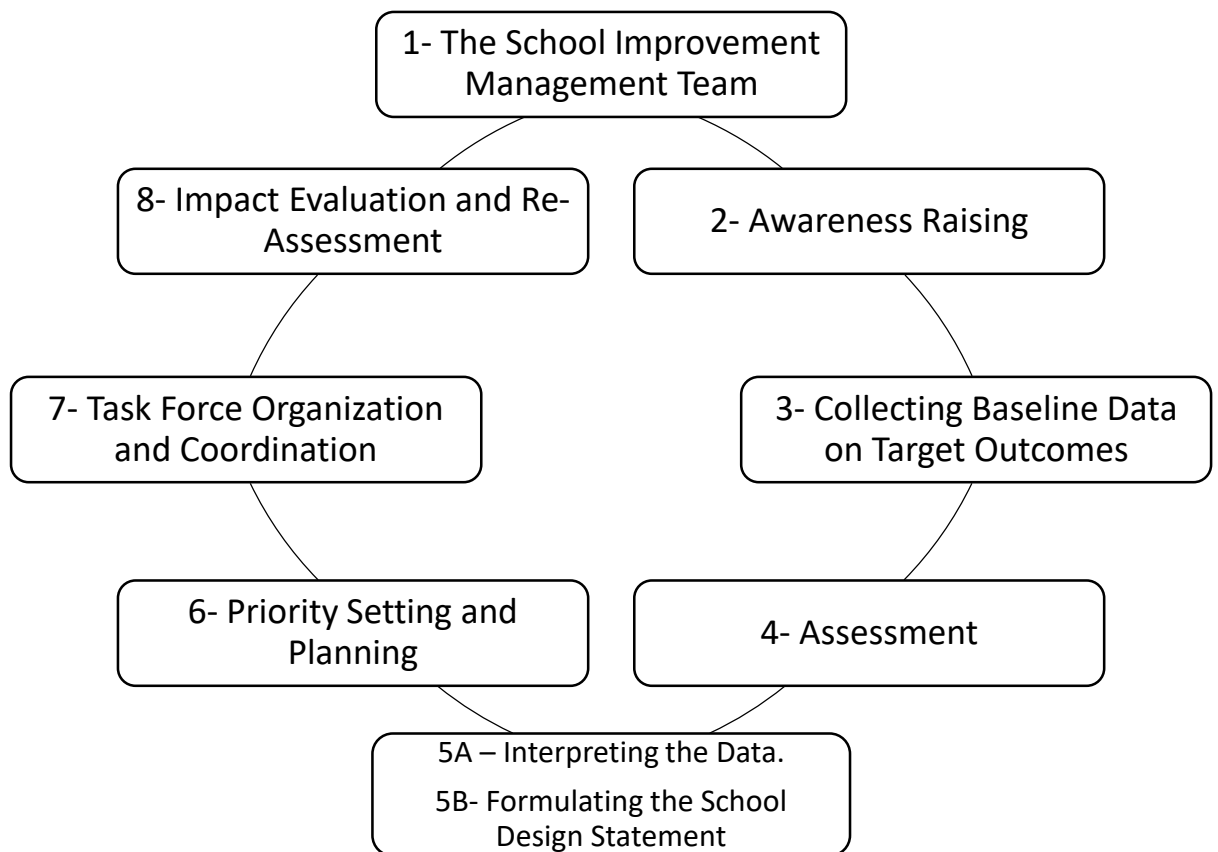


### ***Evaluation-Based Models***

#### ***The CASE-IMS Model***

The Comprehensive Assessment of School Environments (CASE) model has been incorporated in a computerised Information Management System (IMs) for schools to profile school productivity and efficiency. Keefe (1994) believes that evaluation is the core to all school improvement efforts. It is essential to put evaluation as one component of school improvement to diagnose school needs, planning desired changes, evaluating the implementation and the planned interventions. The CASE-IMS improvement process has eight steps, as shown in Figure 4.14.

Figure 4.14: The CASE-IMS Process



Source: (Keefe, 1994)

### ***Steps/Principles Models***

#### ***Nine Principles for Effective School Improvement***

When it comes to enhancing student achievement, teachers play a key role, resulting in a need to focus on teachers' practices and professional development. Kuijpers, Houtveen, and Wubbels (2010), believe that improvement in student performance can be achieved by implementing the nine principles for effective school improvement that are incorporated into a model that involves two cyclic processes: the individual coaching cycle and the team monitoring and training cycle. The nine principles are:

Principle 1: Take the school in question as a starting point;



Principle 2: Use a systematic cyclic approach to improvement;

Principle 3: Focus on the internal conditions (teaching and learning processes);

Principle 4: Focus on school procedures, roles, structures and facilities that support the teaching and learning processes;

Principle 5: Formulate educational goals at school, teacher and student level;

Principle 6: Apply a multi-level perspective;

Principle 7: Adopt integrated implementation strategies;

Principle 8: Include external support; and

Principle 9: Use integrated information from various research domains.

### ***Holistic School Reform Models***

#### ***Comprehensive Supervisory Model***

Increasing concern over the quality of learning and student achievement has resulted in most countries implementing education reforms and seeking models for improving teacher instructional competence through professional development. A model that recognises that each teacher needs an individual professional development plan, and requires different supervisory styles is the Comprehensive Supervisory Model. The overall goal is to combine the teacher types with supervisory styles to make the greatest impact on student learning effectiveness in the classroom. Reinhartz (1987) suggested that a comprehensive supervision model begins with supervisors identifying the teachers' needs, recognising that each teacher is an individual with a unique level of professional development, then consulting with teachers about the areas for

improvement and how enhanced competency can be developed, in a model where both teachers and supervisors can make a difference.

### ***Comprehensive School Reform (CSR)***

CSR focuses on improvement for entire schools rather than on particular populations of students within schools, and it is not limited to particular subjects, programmes, or instructional methods. It is intended to foster schoolwide change that affects all aspects of schooling (e.g., curriculum, instruction, organization, professional development, and parent involvement). It is premised on the belief that there are specific characteristics associated with successful schools such as shared goals, a positive school climate, an effective school leadership, maximised learning time, staff development, parental involvement and strong external support. However, whilst it does not prescribe the practical methods by which schools can become successful, it attempts to address this area by providing designs by which effective schools can be created (Desimone, 2002).

### ***School Improvement Planning***

School improvement planning is a process through which schools set goals for improvement, and make decisions about how and when these goals will be achieved. The objective of the process is to improve student achievement levels by enhancing the way curriculum is delivered, creating a positive environment for learning, and increasing the degree to which parents are involved in their children's learning at school and at home. A school improvement plan is "a road map that sets out the changes a school needs to make to improve the level of student achievement, and shows how and when these changes will be made" (Ontario. Education Improvement Commission, 2000, p. 6). The plan helps principals, teachers, and school councils answer the questions "What will we focus on now?" and "What will we leave until later?" The plan

encourages staff and parents to monitor student achievement levels and other factors, such as the school environment, which are known to influence student success. It is also a mechanism through which the public can hold schools accountable for student success and through which it can measure improvement. To develop the school's improvement plan, a school's stakeholders work through a variety of activities focused on three areas of priority: curriculum delivery, school environment, and parental involvement. For each of these areas schools need to establish:

- A goal statement
- Performance targets
- Areas of focus
- Implementation strategies
- Indicators of success
- Time lines
- Responsibility for implementing strategies
- Checkpoints for status updates
- Opportunities for revisions (Ontario. Education Improvement Commission, 2000).

***The NCEA Core Practice Framework:***

According to the National Centre for Education Achievement (NCEA), there are demands to prepare students well for the challenges required by college, skilled careers, and informed citizenship. Therefore, only a system-wide approach to improving teaching and learning can make it possible for students to receive good teaching across all school levels and pathway to college and career readiness. The NCEA Core Practice Framework is designed to help educators and policymakers develop and support a

coherent, comprehensive, and sustained approach to their improvement efforts. The framework provides both *structure*, a way of categorising those educational practices that distinguish higher performing schools from others, and *content*, a collection of information on the practices themselves. As such, it provides an organising guide for all improvement decisions.

The structure of the Framework is built around five primary challenges (themes) that facilitate improved teaching and learning in a school system. The themes are:

Theme 1: *Student learning: Expectations and Goals*-clarifying what is to be taught and learned by grade and subject.

Theme 2: *Staff Selection, Leadership, and Capacity Building*-creating and fostering high-capacity leaders and teachers who collaborate to ensure that students reach ambitious learning goals.

Theme 3: *Instructional Tools: Programs and Strategies*-systematically identifying, adopting, and modifying what works and discontinuing what does not work; ensuring that leaders and teachers have the strongest and most proven resources available.

Theme 4: *Monitoring: Compilation, Analysis, and Use of Data*-using assessment information to keep track of where and when learning is taking place and whether students are meeting growth and performance goals.

Theme 5: *Recognition, Intervention, and Adjustment*-responding quickly and appropriately to the feedback provided by the data (Dougherty & Rutherford, 2009, p. 4).

### ***Sustained Capacity Models:***

#### ***The Capacity COSMIC C-B Model:***

Crowther (2011) argues that the COSMIC C-B model represents the clearest picture yet developed of how a school can achieve enhanced outcomes and sustain those outcomes in the face of changing times, changing circumstances, changing external priorities, and changing people.

*Figure 4.15: The COSMIC C-B Model*



The capacity-building framework is labelled *COSMIC C-B*, which is an acronym drawn from the six dynamics that make up the model:

- **Committing to school revitalization**
- **Organizational diagnosis and coherence**
- **Seeking new heights**
- **Micro-pedagogical deepening**

- Invoking reaction
- Consolidating success, and C-B is the representation of the concept of school Capacity Building.

## **4.2. The School Capacity Building for Sustainable**

### **Improvement (SCBSI) Model**

The SCBSI model utilised in this study was derived from Crowther's model (2011) COSMIC C-B, and drew from the most universally adopted principles incorporated with other models (as outlined above) and the experience of other successful school improvement initiatives (see Chapter 3), after taking into account the local contexts. The SCBSI model took into consideration that each school has its own needs, ways of implementation, challenges, and strengths, and therefore, the model needed to allow schools to be treated individually. Although the SCBSI model has similar elements to the COSMIC C-B, the way SCBSI was implemented was contextualized to suit the Middle East context, allowing for the School Improvement Team (SIT) members to oversee responsibility for their allocated schools' improvement processes and students' outcomes. The SCBSI model was put into the school context and shared with school principals. Then discussions of school improvement began with an examination of how school improvement was set up to facilitate the improvement initiatives as Sutherland (2004) suggested. In the next sections, each element of the SCBSI model will be discussed in more detail.

### **4.2.1 Committing to School Improvement**

According to a number of studies (Ail, Taib, Jaafar, Salleh, & Omar, 2015; Jo, 2014; McInerney, Ganotice Jr., King, Marsh, & Morin, 2015; Mertkan-Ozunlu & Thomson, 2009) successful reform depends on the commitment of the stakeholders. Commitment is variously defined as "... a desire to belong to the organisation and a willingness to display effort on behalf of the organisation" (McInerney et al., 2015, p. 11) or "a willingness to give your time and energy to something that you believe in, or a promise or firm decision to do something" (Cambridge University Press, 2015). Having established that one of the key characteristics of high quality teachers is commitment, it was essential that this was included in the SCBSI model as it appears to be the driver for teachers to engage in their work, to help students to learn, to search for more effective teaching and learning methods, and to improve their performance. Teachers' commitment extends beyond the classroom as they collaboratively work with other teachers inside their schools and with other schools through professional learning communities (Hopkins & Stern, 1996).

Commitment is a powerful force and, where lacking, undermines school improvement initiatives, no matter how promising they might appear to be. If school staff do not commit to the school improvement process, implementation of the SIP will not be effective and success will be unlikely. This does not mean that all school improvement initiatives that were not initiated by the school are going to fail, but it does mean that any school improvement initiatives introduced by the government must include steps to develop teacher commitment before implementing the improvement initiatives (Walter, 2004). Whilst commitment is not the only factor for successful implementation of school improvement projects, Fullan (1985), had found that high performing schools

did show a high degree of commitment to improve student performance as well as a strong commitment to professional learning (ACT Department of Education and Training, 2009).

Drawing from the literature on school improvement, school effectiveness, and on the input from school improvement projects, gaining and maintaining commitment long term is seen as the essential first step for implementation (Anderson & Kumari, 2009). For successful implementation research emphasised school staff commitment (Hopkins et al., 1999) regardless of the types or levels of organisations where improvement strategies were initiated. Committing to school improvement will raise school staff productivity, reduce complaints, direct all actions toward a clear aim, and increase the value of collaborative teamwork to share the responsibility. This element therefore serves as a starting point for school improvement implementation as without it, school improvement initiatives might fail, Wiseman warns (2010).

*To sum up*, school improvement is basically a process of changing school culture. To do that, teachers need to understand and commit to the improvement as it involves changing their own practices and measuring the impact on students' outcomes (A. Harris & Lambert, 2003). How commitment is achieved is still an unanswered question, as was mentioned in the literature review (Chapter 3). This study aims to find more about how commitment is gained and maintained by utilising a participant observer approach to gather data in the research methodology.



#### **4.2.2 School Diagnosis and Coherence**

The main purpose of school diagnosis (evaluation) is to improve schools and enhance the performance of learners (Gustafsson et al., 2015; O'Brien, McNamara, & O'Hara, 2014). The process of diagnosis provides schools with relevant information including the development or the identification of local, national and international standards against which to offer the necessary feedback to all stakeholders, including the justification of adopting school improvement initiatives (Claudia-Simona, 2013). One of the main advantages of the school diagnosis process is its team-building effects and "the resulting outcomes of the process, which can include: enhancing shared understanding; supporting and reinforcing the programme; increasing participants' engagement, sense of ownership and self-determination and engagement development" (O'Brien et al., 2014, p. 174). In other words, this process can assist in developing school coherence. Crowther (2011, p. 53) indicates that school coherence "occurs when key school features are clearly understood by members of the organisation and brought into alignment with each other". School coherence is indicated by shared goals and a positive school climate (Desimone, 2002).

Research evidence supports the importance of teacher collaboration in setting goals and building plans to secure school improvement. Consequently, the degree of collaboration in understanding the areas of strengths and identifying those aspects that need to be improved was found to be a strong indicator of a school's capacity for improvement (A. Harris & Chapman, 2004) evidenced by, for example, setting a plan that enables students to meet state standards based on a school needs assessment (Desimone, 2002). Similarly, other researchers have also found that highly effective schools develop and share clear goals and standards of professional practice (Fullan, 1985; Hopkins et al.,

2014). For successful implementation of a continuous improvement strategy there are some features that have been found to assist in engaging schools such as: developing a shared vision; teacher involvement; collaboration; data-based decision-making and the use of performance data to guide decisions for improvement (Anderson & Kumari, 2009; Hopkins et al., 1999). Collecting multiple data about students' achievements, an emphasis on the context of individual schools, and starting a school initiative of the schools' own volition were also indicators of successful implementation (Creemers & Kyriakides, 2008). However, for successful implementation it is not only collaboration between teachers that is needed - collaboration with other stakeholders is also required, for example involvement of a parents' council (Potter et al., 2002), could result in collaborative school planning. Successful school improvement programmes encourage schools to work with partners to help the school to identify its core issues through surveys of teachers' views, collecting the data, analysing and presenting data on student achievement, and using this data to plan for better practice (Potter et al., 2002) in a positive climate (Coe, 2013). Nevertheless, Wiseman (2010) argues, the most important partners in any school improvement initiative are the teachers. When teachers construct their learning collaboratively and where everyone's action within the school matches the vision of the school, then both school performance and learner achievements will improve (ibid.). Therefore it has been identified that the key characteristic of high quality teacher performance is the ability to work collaboratively with other teachers, to jointly reflect on that work, and to perform practices that match the school's vision and enhance its performance (Hopkins & Stern, 1996).

*To sum up*, highly effective schools use diagnosis and collaborative practice against local, national and international standards. Based on that they develop and share clear

goals, engage all stakeholders into continuous improvement initiatives and use the performance data to guide decisions for improvement.

### **4.2.3 High Expectations**

Having high expectations for school performance in general and measuring whether or not they are achieved can help to drive school improvement and enhance students' outcomes (Coe, 2013; Whelan, 2009). It is essential to create high expectations for all students (McInerney et al., 2006) and to maintain these within a supportive school environment that is open to students' individual needs and differences rather than holding the same level of expectation for all (Gill et al., 2004).

High expectations lead to student motivation (Aksit, 2007), ensure that students consistently undertake challenging learning tasks (Hopkins et al., 2014) and receive learning support with appreciation of their work. Effective schools expect high performance from their students (Fullan, 1985) and work accordingly to achieve that expectation (Hopkins et al., 1999). In addition, high expectations can be set for student behaviour (Potter et al., 2002) with supportive learning environments created that will enable students to reach high standards (Dağ & Gümüşeli, 2011). High performing schools were also found to set high expectations for learning that challenged and engaged all students, as well as providing the necessary support (ACT Department of Education and Training, 2009; Dougherty & Rutherford, 2009; Ontario. Education Improvement Commission, 2000).

*To sum up*, successful schools share high expectations for students' success, challenge students to achieve more, provide activities related to teaching and learning, and provide the needed support to achieve these expectations.

#### **4.2.4 Deep Learning**

Deep learning refers to understanding the texts and meaning and significance (Chotitham, Wongwanich, & Wiratchai, 2014) and fosters professionalism, and lifelong learners who develop skills of reflection, skills of inquiry and independent learning (Tsingos, Bosnic-Anticevich, & Smith, 2015). Successful schools are those where the focus is on both students' and teachers' learning (A. Harris & Lambert, 2003). As a result of that focus, teachers collaboratively plan and communicate to improve their practices, place an emphasis on teaching and learning (Potter et al., 2002), develop a positive climate (Coe, 2013) and a supportive learning environment that leads to effective professional development (Dağ & Gümüseli, 2011; Dougherty & Rutherford, 2009) that has an observable impact on student learning.

The main aim of improving teaching and learning of schools is to support teachers to provide effective methods to improve students' achievement (Creemers & Kyriakides, 2008). School improvement depends on what teachers do and think. Learning in classrooms and schools becomes effective when school climate is organised to motivate teachers and reward accomplishments (Fullan, 2007). Therefore, the high performance schools were found to have high quality teachers (Hansen, 1981; Whelan, 2009). When teaching becomes an attractive career choice and there is a pool of people that schools can select from to become teachers, then the chances of these schools becoming amongst the top-performing schools is increased, according to Whelan (2009). Because

it has been found that teacher's practice and behaviour will have a major influence on students' achievement (Centra & Potter, 1980), it would seem that the best investment in school improvement remains with up-skilling teachers and influencing how they behave.

Designing school improvement initiatives focusing on the classroom level may improve the teaching and learning practice of individuals but not necessarily improve the learning environment of the school. The purpose of exploring the effectiveness of teaching and learning methods is to maximise the effect that these might have on students' outcomes. When a positive effect of a teaching and learning method is found, it is expected that support would be provided to teachers through professional development programmes to help them implement that method to enhance students' learning (Creemers & Kyriakides, 2010). This can be done through a wide scope of work to improve teaching and learning and make it possible for students to receive good learning, yet, it has to be year after year, across different subjects and to all class levels (Dougherty & Rutherford, 2009; Reynolds et al., 2014). That is why high performance schools have developed coherent mechanisms to improve teaching and learning that endure and they measure the impact of these interventions, which include offering support to teachers (Dougherty & Rutherford, 2009). Consequently it has become widely recognized that professional development and training opportunities are essential components of school improvement (Desimone, 2002; A. Harris & Chapman, 2004). Research on school improvement also suggests that, as well as providing focused and sustained professional development (Aksit, 2007; Desimone, 2002), high performance schools develop standards of professional practice to enhance the quality of teaching and learning as a central theme to improve school performance, and they also create professional learning opportunities that sustain best practice and enhance students'

learning (Fullan, 1985; Hopkins et al., 2014). One of these standards is the continuity of teachers' collaboration and working together toward improving their practices and students' achievement, as opposed to individual working (Lewis, 2006).

*In summary*, the quality of teaching and learning and the approach of deep learning are factors of high performance schools. High performance schools challenge and engage students, they focus on the quality of teaching and learning in every class, and reinforce the commitment to professional learning while being supportive of individual needs (ACT Department of Education and Training, 2009; Walter, 2004). In order for schools to enhance their performance and students' achievement, they need to develop a deep learning approach, where students and teachers reflect on their learning and make learning meaningful.

#### **4.2.5 Change Reaction**

Change reaction happens when teachers share their practices and enhance their collaborative working in order to adapt the strategies for school improvement to changed circumstances. This process involves professional learning communities, professional development programmes, and parents and students' involvement. Building professional learning communities is considered to be vital for teachers' professional development and improved students outcomes (A. Harris & Lambert, 2003). Teacher professional development programmes ensure that all students have access to outstanding teaching and benefits from high-quality teaching (Barber & Mourshed, 2007). As the professional learning communities and teacher professional development were discussed extensively in Chapter Three, this section will focus on the involvement of students and parents.

Parental support, which establishes a shared understanding and a strong partnership between school and parents, has been associated with effective school improvement (Desimone, 2002; Fullan, 1983). This partnership allows the school and its parents to share the responsibility for all students' achievements. The partnership approach also provides a way for parents to be actively involved in school decision-making, including planning. Parents who share common understandings about why a school improvement initiative is needed and how it can be developed and implemented are more likely to support proposed changes, and to accept the responsibility required for effective implementation (McInerney et al., 2006). Furthermore, parental involvement supports learners' achievement (Rutter & Maughan, 2002). Successful schools are the ones that include parents and students in the school improvement process (Dağ & Gümüşeli, 2011). This claim is supported by research on school improvement that suggests parental involvement is a key factor that should be taken into consideration for effective school improvement (Aksit, 2007; Desimone, 2002; Fullan, 1985; Potter et al., 2002). High performance schools encourage and support parents to be involved in their children's learning, creating opportunities for collaborative relationships with parents, and to celebrate and promote their children's achievement (ACT Department of Education and Training, 2009; Hopkins & Stern, 1996). Parental involvement is seen by many researchers such as El-Hilali and Al-Rashidi (2015), as the most significant of the many factors contributing to a student's success in school. When parents are involved in students' learning, their level of achievement increases, attendance and homework completion improves, and students generally have more positive attitudes towards school (Fullan, 2000; Ontario. Education Improvement Commission, 2000).

*In summary*, schools perform better when teachers share their practices through professional learning communities, and schools establish a shared understand and a

strong partnership with parents. This partnership allows the school and its parents to share the responsibility for all students' achievements.

#### **4.2.6 Share Success**

As has already been identified in the preceding sections of this chapter, providing opportunities for parents to be involved in celebrating their children's achievements is a very important factor in gaining their support and commitment to the school. Indeed effective schools have been identified as those that not only share success regularly, but also measure whether students have met the performance goals established, and they monitor their progress regularly (Fullan, 1985), reflecting on what has been done well and what has not been done well (Potter et al., 2002). Effective schools share success in order to keep track of where and when learning has taken place, and they use that data as the basis for further improvement (Dougherty & Rutherford, 2009).

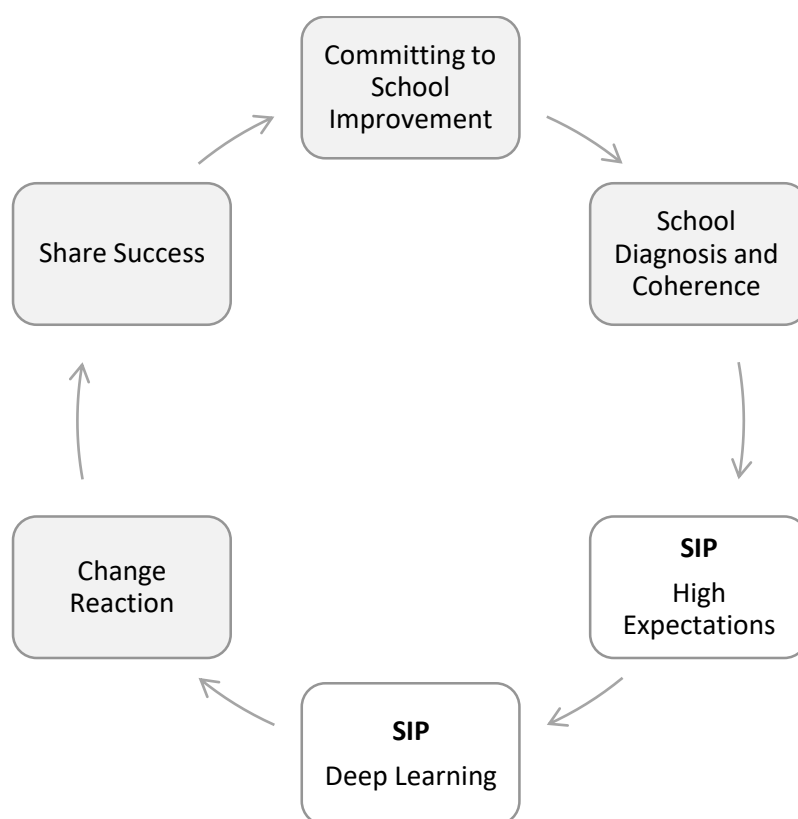
### **4.3 Differences and Similarities**

The MoE designed the SIP to enhance the performance of government schools and improve future career outcomes for students, as was outlined in Chapter Two and summarised by Figure 2.5. The researcher created the SCBSI model to guide practice and planning in an attempt to make the SIP more successful. The SIP already included high expectations and deep learning, but the revision, the new SCBSI Model, added several new aspects that had been highlighted in the literature as important factors in the success of any school improvement initiative, such as committing to school improvement, school diagnosis and coherence, the change reaction aspect and also



sharing success. The differences and similarities between the two models are summarised in Figure 4.16.

*Figure 4.16: The SCBSI Model with SIP Components Identified*



*Key:*

|  |   |
|--|---|
|  | <i>New components</i>                           |
|  | <i>Existing components that were in MoE SIP</i> |

The SIP Model as implemented in Bahrain was, as outlined in Chapter 2, not making an impact on students' national and internationally benchmarked results. It clearly needed other elements or other practices to achieve its main objectives. The SCBSI model outlined above was designed to fill the gap the SIP model appeared to have in terms of missing elements for successful and sustainable school improvement.

## 4.4 Conclusion

This chapter describes the six elements of the School Capacity Building for Sustainable Improvement (SCBSI) model that evolved from the MoE SIP, built from the knowledge and experience gained 'on-job' as a Cluster Team member and informed by the experiences of other schools and successful education reforms from the literature review in Chapter Three. Building on the original SIP's focus on Deep Learning and High Expectations, an additional four elements (committing to school improvement, school diagnosis and coherence, change reaction and share success) were included in the revised SCBSI model, as these were elements identified from the international review of what seems to work across different school improvement models in different countries.

Though the six elements that compose the SCBSI model are shown as occurring sequentially, one after the other, a unique feature of the SCBSI Model is that it allows for flexibility of approach, so each school can implement the six elements of the SCBSI model in a way that best suits its needs. The four schools that comprise this case-study shared the same six elements of SCBSI, but their implementation differed in each school depending on the identified needs, specific requirements and environmental context as well be illustrated in Chapter Five and Chapter Six.

## **Chapter Five: Research Methodology**

### **Introduction and Background**

Bahrain wants all schools in the Kingdom to be stimulating environments where children and young people can do their best and learn effectively in different ways so that they can be prepared to take their place as citizens, able to contribute to the workplace and to wider society. Concerns about trends in TIMSS results, which indicated that Bahraini learners were falling behind their international counterparts, led to the MoE launching a School Improvement Project (SIP) in 2008, with the aim of lifting the performance of all Bahrain Government schools. At the time, I was employed by the Ministry of Education as a Cluster Team member, facilitating the improvement process across a number of schools. My experience and investigations into school improvement initiatives in other countries led me to believe that the MoE initiative could be enhanced with some modifications, (as described in Chapter Four). This chapter focuses on the methodology applied to the case-study itself, identifying how each stage of the SCBSI was implemented, measured and evaluated.

The literature review, Chapter Three, indicated that many of the previous studies had used a case-study approach (Sutherland, 2004), and therefore case-study was selected as the most appropriate approach for this investigation. This selection was supported by Hitchcock and Hughes (1995) who advise that case-study is the most appropriate design for school-based research because it offers teachers the ability to conduct research in their own settings. It also enables "the researcher to intensively investigate the case in-depth, to probe, drill down and get at its complexity, often through long term

immersion in, or repeated visits to/encounters with the case" (Arthur, Waring, Coe, & Hedges, 2012, p. 138).

This chapter discusses first the objectives and research questions, followed by the research approach, which includes the research study method, and the case-study research design. Issues related to the generalisability, trustworthiness and reliability of the findings are identified and the steps taken to negotiate access are then described. This is followed by a description of the location and context, a summary of methodological issues, and details of the data collection methods and the conduct of data analysis.

My MoE work role and previous experience as a QQA lead reviewer allowed me to bring 'tacit' or 'insider' information, and insights from my personal experiences into the research (Maxwell and Thomas, 1991, cited in Gavanaugh & Dellar, 1997). Whilst conferring these benefits, my role as a participant researcher also, however posed potential for significant ethical issues, and how these risks were mitigated through an appropriate methodology is described in this chapter.

## **5.1 Objectives and Research Questions**

The purpose of this study was to understand precisely how to build schools' capacity for sustainable improvement. The key question that initiated this research was how to make the Bahrain schools' improvement initiative more successful. The school improvement literature identified a number of elements, of which six were identified as common internationally (committing to school improvement, school diagnosis and coherence, high expectations, deep learning, change reaction, and share success) and

probably relevant to the Bahrain education context. These were used as a basis to develop the main research objectives:

1. To critically evaluate the implementation of the SIP in the MoE in the KoB.
2. To develop an effective and sustainable model to foster students' academic achievement and consequently,
3. To recommend an appropriate course of action that will facilitate relevant decisions regarding education and students' academic achievement in the MoE in the KoB.

In addition, the specific research questions to guide this study were developed from the international literature and the local context:

How to make the MoE's school improvement initiatives in the KoB more successful was the driving question that initiated this study. Sub-questions to assist exploration were determined, and these were:

- What is needed for school improvement to become sustainable school success?
- How does school capacity building as a process help in building and sustaining school improvement and learner achievement?
- What type of leadership ensures building and sustaining school success?
- What is the effect of school capacity building on students' academic achievement?

## 5.2 Approach

### 5.2.1 Research Study Method

My intrinsic interest in school improvement came from a love of my work with schools, a belief that student achievement could be enhanced and my desire to ensure that as many students as possible went on to make the best of themselves. As a Cluster Team member I believed that the education system in Bahrain could be improved to enhance the learning experiences for students and the overall school results. These circumstances suggested a case-study was the best approach.

Case-study is an investigation to answer particular research questions using a range of evidence available in a particular case setting. A high degree of confidence in the findings is able to be provided by the use of more than one method, and by the bringing together of the perspectives of the various stakeholders from the four school sites within the case-study of school improvement (Hammersley, 2007; Skott & Ward, 2012). This triangulatory approach enabled a better understanding to be reached, as advocated by Cousin (2009). To address the research questions and to do justice to the complexity of the topic, this study employed three interactive and complementary strands (qualitative data, quantitative data, and time in the field).

1        *Quantitative*: examining the extent of the problem and establishing patterns of diminishing learner achievement against TIMSS and National Examinations (NE) benchmarks and school performance based on National Quality Review criteria. The quantitative component of this study was based on measures of (a) the average percentage of the progress between the baseline survey questionnaire in the six elements of the SCBSI, and the post survey one, and (b) the difference in the performance mean

in the students' NE results before the intervention and after the intervention. The quantitative component included results from a baseline survey questionnaire, a post survey questionnaire, and students' NE results. Such triangulation is recommended by Borman et al. (2000).

2      *Qualitative*: Listening to stakeholders' perspectives, for example, school principals, principals' assistants, senior teachers and teachers. The qualitative sources of data included a baseline survey questionnaire, interviews, participant-observation field notes, a post survey questionnaire, and qualitative data synthesis, as recommended by Borman et al. (2000).

3      *Longitudinal*: Tracking the quality improvement journey of four primary schools in the adoption and implementation of the quality improvement initiative over the period of one academic year.

‘Intrinsic’ case studies, such as this one focusing on school effectiveness, have in common the aim to seek greater understanding of a particular case in all “its particularity *and* ordinariness” (Stake, 2006, p. 437), but this can also be described as an ‘instrumental’ case-study through which the development of greater understanding of a generic phenomenon can occur. To understand complex phenomenon, it is "often useful to look carefully at persons and operations at several locations," according to Stake (2006, p. v). Four school sites were selected to provide a range of setting to explore the effects of SCBSI on school performance and learners' achievement, a problem that they all had in common, but to varying degrees. In this way the schools are "categorically bound together," forming a collection of cases embedded within a case, what Stake refers to as the "quintain" design of case-study (2006, p. 6). In this case-study, then, there are four school sites, where each is treated as an element in the



overall case-study of school improvement in Bahrain. Although the case comprises several physical and social sites and numerous individuals, the focus here is on aspects and activities related to school effectiveness and sustainable improvement, not on all facets of the schools that make up the case sub-sections. Ebbutt's consideration of problems encountered by previous multi-case-study researchers led him to conclude that it was better to see multiple site investigation as one case (1988, p. 358), citing Sadler, 1981) rather than as a collection of case studies. An advantage of this approach is that it allows for cross-site analysis of the schools' experience of the MoE's school improvement projects in KoB in an integrated way. This chapter describes the process of gathering the feedback to map the experiences of the 144 educators involved in the implementation of school improvement initiatives over the academic year 2012/2013. This case-study is organised round the central issues of sustainable school improvement and its impact on learners' achievements and so, though the case is singular, it is considered to be made up of four subsections (school sites), each with its own way of doing things (culture) and its unique groups of school staff who brought their own experiences.

### **5.2.2 The Case-Study Research Design**

Founded on the seminal work of McMillan and Schumacher (1997) and Yin (1994), Coutts' school-based research design provided a useful design framework to organise this study, to plan and structure the investigation, to link the initial question driving the research to the data to be collected and to the conclusions (2007, pp. 140–141). This case-study similarly utilises a modification of the five questions identified by Denzin

and Lincoln (2000) to loosely guide the outline of methodological issues associated with the design and conduct of this school improvement case-study.

1. How will the data generated allow the researcher to speak to the problems of praxis and change?
2. Who or what will be studied?
3. What strategies of inquiry will be used?
4. How will the design connect to the paradigm being used?
5. What methods will be used for collecting and analysing data?

***How Will the Data Generated Allow the Researcher to Speak to the Problems of Praxis and Change?***

School Improvement is a process that applies the theoretical knowledge about the factors that can improve learning into the day to day practices found in schools. The approach taken is an in-depth study of a small body of empirical materials (cases and processes), within the natural settings where the processes of school improvement being studied occur. In this case-study an intervention was introduced into four schools and, through the facilitation and guidance provided by the researcher as a Cluster Team member, the SIT members are encouraged towards praxis, that is informed, committed action that attempts to inspire innovation that results in a new sort of school (Smith, 1999). The quantitative and qualitative data collected over the duration of the study are presented back to the participants and discussed. Through this dialogical engagement, there is the intent to achieve commitment to a course of action that leads towards sustainable improvement. A mixed methods approach was adopted, in which quantitative and qualitative data were used to measure the SCBSI quality, its impact

and deficiencies, in accordance with the recommendations made by Hopkins, Reynolds and Gray (1999).

### ***Who or What Will Be Studied?***

To understand complex phenomena, it is “often useful to look carefully at persons and operations at several locations,” according to Stake (2006, p. v), and thus four school sites were selected to provide a range of settings to explore the school improvement initiative in KoB, which was part of a nationwide project across all government schools. Private schools were outside the scope of this research project.

Several criteria were applied in selecting a range of different schools for the study: ease of access, commitment, size, gender, location, and QQA grades. This was an opportunistic sample, as most of these schools were in the cluster where the researcher worked. This facilitated ease of access and allowed for full immersion in the project, but at the same time also raised potential ethical issues that are detailed later in the chapter. The researcher had worked with three out of the four schools for one or more years before the intervention was conducted, and therefore there was 'tacit knowledge' and a deep understanding of the schools' situations, their strengths, and areas for improvement, that was able to be utilized to produce a more meaningful interpretation of results. As the researcher had generally established very good relationships with all the schools across Bahrain, but especially with those selected, it was assumed that their commitment to the research would be high as commitment is the first step that the literature established was the key to success in any school improvement and also an important factor in producing meaningful data (Mourshed et al., 2010). Gender was a factor in selection, and the fourth school was chosen because the students were females,

whereas in the other three schools the students were male. The girl's school was situated in a city, while two of the three boys' schools were situated in villages. By incorporating four schools for the study, rather than focusing on just one instance, the process of data collection aimed to collect a range of perspectives so that what was unique to each school could be identified, as well as allowing common factors to emerge, which might have applicability to a wider context, in accordance with recommendations made by Mourshed, Chijoke and Barber (2010).

Although the four schools selected were all primary schools, they are distinctive in their performance and type, with different levels of learner achievement, sizes, locations (representing four governorates), number of years involved in implementing the SIP, gender composition of staff and students, and QQA rating. The schools were chosen because their principals and SIT members were more collaborative with the Cluster Team than other schools and they were not new to the SIP programme. The names of schools are fictitious to respect the confidentiality and anonymity of those participating.

Key informants in this case-study were the participants in the improvement strategy, the SIT members through whose eyes the case will become known, and their views were triangulated with the perspectives of school principals, principal's assistants, senior teachers, and teachers. A total of 144 participants were involved over the course of the study of the intervention. The SIT members that were selected to be interviewed were chosen because of their positions, knowledge of the SIP, willingness to participate, and their involvement in the school improvement initiatives.

The study aimed to survey a census of staff within each school, avoiding therefore the issues associated with sampling and representativeness, at least at the school level: Across the four schools, all school staff in one way or another were included in the

study. Decisions regarding involvement were made for the explicit purpose of obtaining the richest possible source of information to answer the research questions. A tentative list of people to be interviewed and to attend meetings was prepared before the intervention began, i.e. purposeful sampling, where the key people were selected to be interviewed, worked with, asked for opinions, and observed. These were selected from the different levels in the school organisation to that there was a range of input from principals, principals' assistants, senior teachers, and teachers. A total of 144 participants responded to the baseline survey questionnaire; 120 participants responded to the post survey questionnaire, and 27 participated as SIT members in the interviews, which occurred six times for each, yielding 148 interviews in total. **Appendix 5. 7** details the number of participants engaging in each type of the data collection methods.

### ***What Strategies of Inquiry Will Be Used?***

According to Coutts, (2007), the strategies of inquiry are the skills, assumptions and practices that the researcher uses in moving from a paradigm and research design to collecting data using a range of methods on location in a case-study setting. In qualitative studies, such as this one, the researcher takes on many roles in the inquiry, constructing from their interpretations of stakeholders perceptions a representation of a complex situation “that changes and takes new forms as different tools, methods, and techniques of representation and interpretation are added into the puzzle” (Denzin & Lincoln, 2000, p. 4).

I was employed by the Ministry of Education as a Cluster Team member, and together with a colleague, worked to coach nine schools to enhance their schools' performance, aiming especially to lift the students' learning outcomes. I was based in the MoE, but

spent most of each working day moving from school to school, connecting to the schools by "condensed field work" Walker (1974, cited in Ebbutt (1988, p. 353). My colleague and I both supported the nine schools in general, but each of us had a number of schools that we worked with intensively. I had five schools, and this arrangement was helpful in overcoming some of the potential ethical issues that commonly arise for participant researchers, as there was another professional who could ensure that the study was not affecting the participating schools in a harmful way. As well as the perceptions gained by interviewing key informants, other data were gained from documents and school records made available as part of a multi-method approach that allowed for triangulation.

My role throughout the academic year 2012/2013, the period of the study, was two-fold: a school coach and a researcher. The purpose of my role was to probe deeply (Cohen, Manion, & Morrison, 2007), to challenge SIT members' thoughts and decisions. The MoE knew that the schools participating in the SIP were facing workload challenges as their daily work was busy, but the school improvement initiative was a MoE requirement aimed at enhancing the achievement of learners ongoing, and one aspect of it was that government schools undertake action research to enhance their practice. My role in that context was to provide support and assistance to the SIT as they implemented the project, which aimed to improve their practices as well as the school's performance as indicated by student' achievement outcomes. The second part of my role was to undertake an overall evaluation of the SCBSI model and its impact on students' outcomes. For the purpose of the evaluation, a conceptual framework based on the six key elements of the SCBSI model (commitment to school improvement, school diagnosis and coherence, high expectations, deep learning, change reaction and share success) was constructed, as outlined in Chapter Four. In supporting the SCBSI,

my role was one of facilitation, coaching, mentoring and advising, providing support, and guidance rather than criticism or judgments. In order to help the SIT clarify their thinking and their direction, as a coach my role was about asking questions and challenging thinking behind the schools' decision making processes, rather than providing the answers. This collaborative approach was important in developing trustful relationships.

By recording all the perceptions gained over the whole inquiry period, both those of the participants in the schools, and my own as participant observer, and piecing these together like pieces of a jig-saw, the aim was to produce a representation of the experiences of the school improvement initiative that was accurate enough to allow for critique and itself be subjected to further improvement.

### **5.3 Generalisation**

This research did not, as its primary purpose, aim to generalise the findings to a broader population, but to synthesise the themes and patterns of school capacity development that were found to be important in organisational improvement and learner achievement. The case-study approach aims instead to provide an extensive description of the context of each school and the circumstances surrounding the development of school capacity for sustainable improvement, so that the picture of each school and the environment surrounding the schools is understood and clear. Stake maintains that if the descriptions of the case-study are detailed enough then they can give the readers an experience which, when added to the readers' own knowledge, can lead to what is termed 'naturalistic generalisation' (2006, p. 442), whereby they are able to see relationships and patterns.





## **5.4 Trustworthiness and Reliability**

Case-study adopts a variety of methods, quantitative and qualitative, and collects data in different ways of experiencing the same issue, to give greater confidence of the findings (Cousin, 2009).

In quantitative research, there is generally the expectation that there will be consistency in methods, conditions and results leading to a judgment that the research is reliable, that it is trustworthy. There are two assumptions linked to the concept of reliability, according to Burns (1994). The first is that the study can be replicated and the second is that two or more people can have similar interpretations by using the same categories of the study and the same procedures. A thorough documentation of all steps and procedures is needed in the final research report to improve reliability and enable others to replicate it. However, the natural setting and ethical considerations pose problems for the replicability of case-study because it is unlikely that similar events will occur in the same way.

Trustworthiness, is an important key to effective research. As trustworthiness is a requirement for both quantitative and qualitative research, if a piece of research is invalid then it is worthless argues Cohen et al. (2007). Throughout the school improvement case-study trustworthiness of data was a prime objective and this was achieved by triangulating data derived from different sites, from different stakeholders and by different methods. The use of a multi-method approach is much more beneficial than a single-method approach because, for example, when the findings of a post questionnaire survey are found to match those of an observational study and the interviewees' response, the researcher can be more confident about the findings, according to Cohen et al, (2007). In this study, triangulation was used to cross-examine

the data gained from semi-structured interviews, observations, survey questionnaires, and documents to strengthen the confidence in the findings from different stakeholders. Data triangulation was also able to be used, as the research was based on four schools, each with its own unique context and different improvement requirements, which enabled a maximization of the range of data in order to contribute to a more complete understanding of building school capacity for sustainable improvement.

The qualitative research findings are presented as quotations of participants' own words (translated from Arabic into English by the author), and these demonstrate the consistency of their views and opinions, when compared with others views on the same topic. The SIT members were individually given the opportunity to correct any misinterpretation of the data collected during the study, to elaborate on any comments, and give more explanation if it was needed. During the research process, all documents and records were kept in a secure location to ensure confidentiality and they will be destroyed on at the completion of this thesis. *Table 5.5* summarises the research instruments utilized and their link with the specific questions that guided this study.

Table 5.5: *The Research Methodology Instruments*

| <b>Research questions</b>  | <b>What evidence will be collected?</b>   | <b>Who will evidence be collected from?</b>   | <b>How will data be collected?</b>   | <b>Practical</b>   | <b>Analysis</b>   |
|--|---|---|--|--|---|
| <i>What is needed for school improvement to become sustainable school success?</i>                   | Opinions:<br>- surveys<br>-interviews<br><br>What needs to be changed to sustain the success?<br><br>What needs to be in place to maintain improvement? | Four primary boys and girls' schools.<br><br><b>Questionnaire:</b><br>Principals, principal assistants, senior teachers, teachers, & other supporting staff<br><br>(paper analysis conducted)<br><br>Two questioners were handed and collected. | Surveys<br><br>Interviews<br><br><b>Questionnaires:</b><br>Handed the baseline survey questionnaires to the four schools' staff at the beginning of the school academic year 2012/2013. In October 2012. | Practical as the four schools within very short distance.<br><br>It took four days to distribute and collect surveys | The survey questionnaires are qualitative and quantitative.<br><br>Categorized and coded to note important patterns and themes<br><br>Coding may also indicate a need for further data collection as new issues emerge. |
| <i>How the school capacity building as elements helps in building and sustaining school success?</i> | Opinions:<br>- surveys<br>-interviews<br><br>What is SIT (principal, principals' assistants, senior   | Baseline survey questionnaire conducted with 144 responses.<br><br>Post questionnaire administered.   | Collected the questionnaires after one day from distribution.<br><br>Handed the post survey questionnaires to the four schools' staff at the end of the school academic                                  | It took from 15 to 30 minutes for the school staff to fill out each questionnaire.                                   | Relationships between the categories identified.<br><br>The quantitative data was analysed using excel sheet.   |

|   |  |   |  |  |
|---|--|---|--|--|
| <p><i>What types of leadership ensure building and sustaining school success?</i></p> | <p>teachers, teachers, and school staff) point of view of the SCBSI themes?</p>  | <p>120 respondents.</p>   | <p>year 2012/2013. In June 2013.</p>   | <p>Then the data, qualitative and quantitative, contrasted and compared with the data from the second questionnaire.</p> |
|   | <p>What is the impact of teachers' professional communities on school improvement?</p>   | <p><b>Interviews:</b></p> <p>School Improvement Team (SIT) members from each school were interviewed.</p>                             | <p>Collected the questionnaires one day after distribution.</p>  |  |
|   | <p>Opinions:</p> <p>-interviews</p> <p>-surveys</p>  | <p>27 members from SIT participated in the interviews.</p>  | <p><b>Interviews:</b></p> <p>SIT members (principals, principals' assistants, senior teachers, teachers, and supporting staff) interviewed individually for around 20 to 30 minutes (6 times throughout the academic year).</p>  | <p>Analysed the interviews using the same methodology as applied with qualitative data from the questionnaires.</p>      |
|   | <p>What is the impact of school leaders on schools' success?</p> <p>What is the impact of (shared leadership) on school improvement?</p> | <p>148 interviews were conducted in six different times.</p> <p>Participants:</p> <p>3 principals,</p> <p>2 principal assistants,</p> | <p>It was time consuming, however, it was a must to find the core category.</p> <p>It took around 3 hours of interview time for each element in each school. (one day for each school).</p> <p>A pre-determined list of questions. Each interview focused on one of the six elements of the SCBSI process.</p> |  |

|  |   |   |  |   |   |
|--|---|---|--|---|---|
|  |   | 10 senior teachers,<br>5 teachers,<br>and 8 supporting staff                            |  |   | Used the field notes taken from each visit to dig deeper to understand participants' view points and cross them with other information taken from other instruments |
|  |   | <b>Observations:</b><br><br>School staff  | <b>Observation:</b><br><br>Field notes were taken in every visit did to the school. A visit in each week was conducted from October 2012 to then of June 2013  | It was practical because I need to visit each school from 7:00 am to 1:30 pm every week once. This was my normal working day. |   |
| <i>What is the effect of school capacity building on student academic achievement?</i> | Examination data<br><br>What are the evidences of improvement?<br><br>National Examinations | Examination data<br><br>Data were collected from the 4 schools, and the Web Site of QQA | Collect the examination results at the beginning of the school year:<br><br>National Examination: 3 <sup>rd</sup> primary (Arabic and Math), and 6 <sup>th</sup> primary (Arabic, English, Math, and Science). | It was practical because the data showed the distance the schools traveled with regard to their National examinations.        | Using SPSS, the data were analysed to see the progress the students made in the National Examination results before the intervention and after the intervention.    |

Collect the National  
Examination results at  
the end of the school  
year.

## 5.5 Negotiating Access

Implementing the intervention and negotiating access with school principals was easily accomplished as there were already established protocols in place within MoE to cover such research projects, as a climate sympathetic to organisational learning was being put in place and action research within schools was being encouraged and actively supported. The Research Proposal was submitted to gain approval from the Scientific Research Directorate in the Secretariat General of the Higher Education Council - MoE to conduct the research in government schools and, after due consideration, the application was approved in principle on October 2012. The Cluster Chief, who had overall responsibility for the Schools' Improvement Project, was asked to allow for the implementation of the intervention in the four schools specifically identified. The Chief was highly appreciative of the initiative, and gave her whole-hearted support because one of her performance criteria was concerning the conduct of research to enhance school performance. There were nine schools in the cluster, and four of the schools were selected and all agreed to participate. After receiving the MoE approval, the selected schools' principals were provided with the acceptance letter from the MoE to conduct research at government schools and then, after receiving and discussing the information sheet, they gave 'informed consent' (*Appendix 5.18*). After this, a meeting was held with the SIT members, as they were the school staff responsible for the SIP implementation, providing the link between the Cluster Team members and the teachers within the schools. SIT members agreed to participate in the study and to act in a liaison role with the teachers for that purpose. Table 5.6 summarizes the characteristics of the four primary schools.

Table 5.6: *School Characteristics*

| <i>Item</i>               | <i>Mohammed</i> | <i>Bader</i>        | <i>Jassim</i>     | <i>Hakeema</i> |
|---------------------------|-----------------|---------------------|-------------------|----------------|
|                           | <i>School</i>   | <i>School</i>       | <i>School</i>     | <i>School</i>  |
| <i>School type</i>        | Primary         | Primary             | Primary           | Primary        |
| <i>Students type</i>      | Boys            | Boys                | Boys              | Girls          |
| <i>Staff type</i>         | Female          | Male                | Male              | Female         |
| <i>Number of students</i> | 345             | 398                 | 151               | 573            |
| <i>Number of teachers</i> | 40              | 34                  | 26                | 51             |
| <i>Number of classes</i>  | 12 + 1          | 14+1                | 6                 | 19             |
| <i>QQA grade</i>          | Good (2)        | Satisfactory<br>(3) | Inadequate<br>(4) | Good (2)       |

A pseudonym has been assigned to each of the schools to protect their anonymity. Similarly, any other identifying characteristics, such as like governorate, have also been removed. Findings concerning the participating schools' characteristics will be discussed in more detail in Chapter Six.



## **5.6 Location and Context**

### **5.6.1 How Will the Design Connect to the Paradigm Being Used?**

When used as a research approach, case-study is both the process and end product of research. It provides a delineated boundary for inquiry, and a structural process within which any methods appropriate to investigating a research area can be applied. Mixed methods is a research paradigm that combines specific positivistic elements of quantitative research methods with specific constructivist elements of qualitative research methods together to investigate the same phenomenon and explore specific issues in more detail (Clough & Nutbrown, 2007). It is advisable for social science researchers to be able to use more than one method in the same research project, triangulating the emerging data in order to fully understand the research topic (Hammersley, 2007; Skott & Ward, 2012). This study included quantitative data, for example, the analysis of students' National Examination performance scores, as well as questions that introduced a qualitative approach, such as those eliciting feedback on teachers' professional development and its impact on teachers' practice. Such 'methodological triangulation' increases the reliability of case-study, bringing different methods together and data sources using quantitative and qualitative data to reach to better understanding (Cousin, 2009).

Interpretive paradigm is the most suited paradigm for this research because "individual constructions can be elicited and refined only through interaction between and among investigator(s) and respondents(s)" (Arthur et al., 2012, p. 21). In this approach, efforts are made to understand the things that exist or happen from within through being an observer (Cohen et al., 2007). Attempts to represent them as data that can be aggregated, analysed, and interpreted (Arthur et al., 2012) is the biggest challenge of using this approach in which the research participants acquired active roles in this knowledge construction. The

interpretive paradigm suggests that the research questions can only be understood through the eyes of the actors, and gaining this understanding was critical, because the aim of this research was to construct a model that builds the school capacity and sustains the improvement in four different school contexts.

So it can be seen that, as this research aimed to introduce changes into Bahrain schools, an intervention research methodology was appropriate, in the belief that the importance of change, and the inside perspectives of that change, can only be gained by a research participant approach, from which one can come to understand how to change. To reach to that view, a combination of qualitative and quantitative approaches was used, with the aim to generate a more accurate and adequate understanding of the phenomena.

### **5.6.2 Time in the Field**

Field work took place over one full academic year 2012/2013. This was a longitudinal study where the researcher was able to observe the day-to-day progress in the implementation of the SCBSI, along with other team members from within the school. Over this period, 144 participants responded to the surveys, 148 individual interviews were conducted, and a meeting held each week with the SIT in order to reflect on progress and make adjustments to the quality improvement plans where needed. A reflective journal was kept, in which observations, reflections and field-notes were recorded for each school. During the time in the field documents and data were collected in a planned sequence so that the outcomes of one research activity could inform subsequent ones. The sequence of events in each school is summarised below:

1. Distribution of the baseline survey questionnaire.

2. Data from the survey was aggregated according to the six elements of the SCBSI model.
3. Aggregated data from the first element of SCBSI model for each school was presented to the SIT members. The data set for each school for each element, for example 'commitment to school improvement' was compared with that from the other three schools.
4. Discussions were held among the SIT members to develop suitable improvement actions to fill the identified gaps.
5. Fieldwork was conducted to provide support and guidance, and to evaluate practice. It included visiting classes, attending meetings, observing students in the break time, and chatting with teachers.
6. Four to six weeks after providing schools with a presentation of findings from the questionnaires, SIT members were interviewed.
7. Steps three to step six were repeated in sequence for the other five elements of the SCBSI model.

The purpose of selecting these four schools was mentioned earlier in this chapter. However, the reason for choosing only four schools was because of the time constraints imposed by work realities, in that only one day per week was allocated for each of the four schools and the fifth day of the week put aside for preparation and administration duties required by the MoE.

## 5.7 Ethical Review

The research was designed and conducted in accordance with the ethical principles and guidelines as specified by Durham University School of Education and in accordance with the guidelines published by the British Educational Research Association. Participation in this research was voluntary. Participants were fully informed of the procedures prior to agreeing to participate by signing an informed consent form. Participants were assured of confidentiality, and the steps being taken not to include any identifying information that might reveal their role in the study were outlined. Research participants were always treated in an honest and respectful manner. The process of gaining approval, commenced with completion of the Research Ethical and Data Protection Monitoring Form (*Appendix 5.8*) and approval from the University. This involved obtaining the approval from the Ethics Committee in the University of Durham, and approval for conducting the research by Bahrain's MoE. Once the formal letter of approval was issued from the MoE to conduct the research, the questionnaires were distributed in the four participating primary schools. The purpose of the questionnaire was explained to the schools to get better cooperation, and this was reinforced by a statement included in the top of the questionnaire about participants' rights, the purpose of the research, and the researcher responsibilities. In accordance with recommendations made by Bell (2010), communications were made about the purpose of the research and other issues such as limitations regarding sharing the data, and guarantees of confidentiality and anonymity, and participants were given the choice of whether to add their names to the survey or return anonymous responses (Clough & Nutbrown, 2007).

The four schools' staff knew the purpose and their responsibilities before the research was conducted (Bell, 2010). The following documents were submitted and meetings were conducted with the four schools that approved the research:

1. An introductory letter to principals – the approval letter from the MoE -, described the research, data collection methods and sought their approval to conduct research.
2. A meeting with the SIT was held where the specific details of the research were discussed especially ethical guidelines and data collection procedures. A list of people intended to be interviewed, meetings to be attended and documents needed to be collected were described. The researcher clarified that participants would be anonymous and that confidentiality with respect to name and identity of schools and participants was assured. It was clarified that the information would strictly be used for academic purposes as part of the doctoral dissertation.
3. A participant informed consent form (*Appendix 5.18*), was signed by every research participant before conducting the interview, to ensure that participation was voluntary (British Educational Research Association, 2011).

These techniques were used with the four schools' staff, to inform the participants and share the purpose with them, so that the potential participant would have a clear idea about the research before giving his/her decision whether to voluntarily participate in or decline participation.

To construct ethical relationships with participants, they were asked to read and sign the participant informed consent form before conducting the interview. The informed consent form addressed the purpose of the research, participants' roles in the study, their rights to voluntarily withdraw from the study at any time, data collection procedures, comments about protecting anonymity of respondents and confidentiality of information they give, and some information in general about the participants profile (British Educational Research Association, 2011).

An underlying ethical principle was that participants had the right to know some of the research findings. After analysing the results of the baseline survey questionnaire, a

presentation was conducted for each school, showing the findings compared with the other three schools' data for each element of the SCBSI. The presentation contained: a brief about the research, National Examination (NE) results, school examination results, the six elements of SCBSI, the comparison among the four schools' results in a specific element, and the comments of the teachers.

My role as a participant researcher brought the potential risk of significant ethical issues, but strategies were put in place to overcome these so that insights from the researcher's personal experiences could be brought into the research. To reduce the challenge of bias in the research findings, an external indicator was added, which was to conduct the intervention and assess whether it had made an impact on students' NE performance scores. In addition, triangulation was applied by using different data sources, different participant types, and different school sites, as discussed in this chapter. The researcher also tried to minimize the power differential that was potentially present in any interview by facilitating it through an exploratory approach, rather than utilising the traditional information prospecting one, in accordance with the approach recommended by Cousin (2009).

## **5.8 Summary of Methodological Issues**

### **5.8.1 Selection of the Case: The Issue of Purposefulness**

Each of the four schools selected had its way of improving its practice, although all of them were engaged in the same model of implementation utilising what is referred to in this case-study as the School Capacity Building for Sustainable Improvement (SCBSI) model. Each school had its unique context, and found its own pathway to improve. This was the reality of the situation, and the challenge was how to investigate the manner in which each element

of the SCBSI model was found to bring about school improvement. All the four individual school sites in the case-study were able to document the extent to which there had been an improvement in their practices, the things that worked well, the particular challenges or difficulties they faced, and what each had learned from these experiences through the processes adopted in this research. The SCBSI elements were then collected across all schools to reach some overarching conclusions about building school capacity for sustainable improvement in Bahrain that it is hoped may have applicability in a more general way to other organisations.

How typical is the case of other cases and whether it is legitimate to make a generalisation, to develop a theory, from only one example is however, a frequently debated issue in the literature (Burns, 1994). In the case-study approach it is left up to the reader to decide how applicable a particular case-study finding is to their own situation. As will be discussed in Chapter Eight, what will be learned from this case-study of school improvement in the Middle East is related to comparisons of how the case is like and unlike other cases, their similarity based on complexity or pattern, rather than on some arbitrary group classification.

### **5.8.2 Research Bias and Validity**

For research to be said to be valid, it must be based on fact or evidence that is capable of being justified. Internal validity is the extent to which results are interpreted consistently- the issues associated with external validity, or generalisability are discussed in a separate section. In this case-study internal validity is taken to refer to the degree of fit between what the researcher records as data and what actually occurs in the school improvement setting. The researcher's aim is to observe and record accurately the perceptions of the participants

to achieve internal validity. To ensure that the data and interpretation of the research was valid, verification of emerging findings was conducted via discussions with SIT members within each school, as well as comparisons of findings across schools.

Case-study is often accused of being subjective, with researchers being influenced by their own values. Indeed, Denzin and Lincoln argue that there is no such thing as value-free inquiry (2000, p. 19). Instead, they maintain that qualitative researchers must make clear their value commitments, identifying their interpretive perspective, as has been done here.

## **5.9 Data Collection**

### **5.9.1 What Methods Will Be Used for Collecting Data?**

The qualitative sources of data included a baseline survey questionnaire, interviews, participant observation - field notes, and a post survey questionnaire. The pre-and post-survey questionnaires also yielded quantitative sources of data, but these were supplemented by secondary data sources from the results of TIMSS scores, National Examinations (NE) scores, and school examinations results.

In this study, the data collection process was guided by the specific research questions and informed by the elements of SCBSI model. Derived from the literature review, the research questions determined the appropriate methods for data collection, with each research question being considered in terms of likely sources of data and possible intervention strategies (Table 5.5). Instruments were developed and refined, resulting in the production of consent forms, intervention schedules that included interviews, meetings, administering survey questionnaires, collecting documentations, completing observations and reflecting using a diary. As this is case-study research, which requires a flexible research design



throughout the intervention and data collection period, the overall plans for the meetings and data collection schedules were modified during the fieldwork process. The next section will discuss each method of data collection used in this study in more detail.

### **5.9.2 Baseline Survey and Post Survey Questionnaires**

The designing of the survey questionnaire was conducted after reviewing the literature and deciding exactly what was needed to be found out. The questionnaire was chosen as a method for data collection because of its suitability for the purpose of providing evidence to address the research questions and its convenience and cost-effectiveness as a way of collecting common information from the large number of staff across the four schools. In designing the questionnaire consideration was given to a number of factors identified by Bell (2010) including the information needed, the acceptability of questions to the subject, and whether there might be problems at the analysis and interpretation stage. To guide the selection and format of questions and the overall survey format, the literature review, information about school improvement models used in other countries and the research's own extensive experience in the field of education were considered.

Two questionnaires at different times were conducted. The first one was conducted prior to the intervention as a baseline survey, to provide an idea of how the school staff were looking at the elements of the SCBSI. It also was used to identify important areas for further action and further investigation. This pre-intervention questionnaire was analysed qualitatively and quantitatively to understand the areas where the SIT needed to be active in order to enhance school performance. It enabled respondents to reply in their own terms, as advised by Cohen et al. (2007) and, where questions were structured for easier analysis, open areas were included for each section to enable participants to give examples as

recommended by Bell (2010). A five point Likert scale response model was incorporated with participants asked to identify how closely statements matched their opinion, rating from one (considered the lowest), to five (the highest), see **Appendix 5.9**. The second questionnaire (post survey) was conducted at the end of the academic year to measure the progress the school made in the SCBSI model against the baseline survey.

The pilot involved administering the questionnaire to a small group of people who closely resembled the research population (Ruane, 2005). The pilot participants included a school principal, an educational specialist, and a teacher, selected to test the length of time it took recipients to complete it, to check that all questions and instructions were clear, and to amend wherever it was necessary, as advised by Bell (2010). The results of the pilot mostly related to the use of language and changes were made after the pilot to ensure clarity in both English and Arabic.

Participation in this research was voluntary, with 144 respondents out of a possible 151 completing the baseline survey questionnaire in October 2012 before the intervention (**Appendix 5.9**), while 120 respondents out of a possible 151 completed the post survey questionnaire at the end of June 2013 after the intervention (**Appendix 5.10**).

## **Focus Group with SIT**

### **5.9.3 Intervention Monitoring: Participant Observation and Reflective Journal**

The advantage of utilising observation as a research tool was its directness. This process provided access to information about the schools and their performance as events occurred in the field, and these were recorded as observation field notes. An observation schedule

was prepared (*Appendix 5.11*), where notes and actions were recorded in the computer at the end of the observation day. An observation form was also used to track the progress and achievement of the SCBSI model. The form included school code, date, item code (the element of SCBSI), summary of what was accomplished /observed, activity, time, and place. It also included sections for reflection, suggestions for the next visit, and an overview of any progress made. Each observation took one working day in schools. One visit per week was conducted for each school over the academic year.

During the schools' visits, recording data and information accurately, and in an unbiased manner, was a major issue as the researcher was playing a coaching role during the study. School staff behaviour could be different when the researcher was not present, though the good relationship established with schools gave confidence that staff's claim that they acted the same whether the researcher was present or absent was correct. However, it is acknowledged that research presence may unavoidably have had an effect on the behaviour of some school staff being observed, especially the ones that were not normally working with the researcher in his role as Cluster Team member.

#### **5.9.4 Interviews with SIT**

The objective of the interviews was to measure the progress made, to understand the obstacles, and to plan for better implementation of the SCBSI elements. A semi-structured interview style, with open-ended questions, was adopted for this research on the basis that it allows for flexibility in exploring issues not thought of in the original scope and for clarifying meaning (Cohen et al., 2007; Dey, 1993; Lichtman, 2010), so understandably this was one of the most widely adopted forms of interview for this kind of research (Cousin, 2009). There were six interviews conducted at six different times with each of the

participants: school principals, school principal's assistants, senior teachers, teachers, and associate staff. These people provided most of the information concerning school capacity building and how to sustain the improvement because they were members of the SIT responsible for the SIP. The results of the analysis of the interviews were used to provide more information about the implementation of the SCBSI process and steps needed to build school capacity.

To ensure consistency during the interview, interview protocols were developed for guidance in eliciting information and in-depth probing to ensure all aspects of the six elements were covered. In the first interview, the researcher introduced himself, described the research, its purpose, steps being taken to maintain confidentiality and anonymity, participants' roles, responsibilities and rights and the duration and frequency of the interviews over the academic year. Then the interviewee was asked to read and sign the informed consent form (*Appendix 5.18*). The interviewees were interviewed six times during the academic school year 2012/2013 to achieve a level of in-depth reflection, as recommended by Arthur et al., (2012).

Each interview was made up of a set of questions focused round one of six elements of the SCBSI model in order to answer the key research questions. The elements were:

Element 1: Committing to school improvement (nine items),

Element 2: School diagnosis and coherence (six items),

Element 3: High expectations (five items),

Element 4: Deep learning (eight items),

Element 5: Change reaction (seven items), and

#### Element 6: Share success (four items).

In total 39 representative items were identified through the SCBSI in this study. The objective of the interviews was to measure the progress made, to understand the obstacles, and to plan for better implementation of the SCBSI elements (Cohen et al., 2007). The interviews were conducted six times according to the six elements of the SCBSI; namely 1- committing to school improvement (*Appendix 5.12*), 2- school diagnosis and coherence (*Appendix 5.13*), 3- high expectations (*Appendix 5.14*), 4- deep learning (*Appendix 5.15*), 5- change reaction (*Appendix 5.16*), and 6- share success (*Appendix 5.17*). Interviews were held after the implementation of each element in the schools, explaining why six interviews were held at six different times. It is noted that not all SIT members agreed to be interviewed because some of them were worried about workload issues and the time involved.

Following the advice of Ruane (2005), the face-to-face interviews were conducted in places free from distractions such as the principals' room, or the meeting rooms to make the exchange of information a comfortable, and conversational one. All the interviews were audio-taped, as audio recording was by far the best way to obtain interview data (Clough & Nutbrown, 2007), and to allow to maintain eye contact and to listen to the record as many times as needed (Bell, 2010). All interviews were recorded in Arabic and analysis was conducted in that language, the researcher being a native Arabic speaker. For ease of readability the themes were then summarised in English. Interviews lasted from 15 to 25 minutes. After the interview, typically discussion continued and whilst these data were not formally recorded in the transcripts the research collected some of these ideas in the reflective journals.

The date of the interview was recorded to make sure that all interviewees were interviewed six times (*Appendix 5.19*). The findings from the interviews were discussed in the SIT meetings in order to verify data collected.

### **5.9.5 Documentary Analysis**

Documents provided another source of information for the study, and these included both national and local sources of evidence, as recommended by Bell (2010): strategic plans, QQA reports, teachers' professional development plans, annual newsletters to parents, and school scorecard forms. Published reports were a further significant source of evidence in this study: Government agencies, such as MoE and QQA produce reports about the school improvement initiatives in the KoB and other documents found useful were the National examinations performance scores, and TIMSS results. These documents were carefully assessed for usability and accuracy before accepting the evidence.

Using multiple data collection strategies helped to put together a story for how to build the school capacity for sustainable improvement. All documents and records were kept in a secure location to ensure confidentiality.

### **5.10 Data Analysis**

Since this research involved multiple schools, multiple data collection methods, and multiple sources of data, there were two forms of analysis for each school, both qualitative and quantitative, and these data were triangulated. In addition, a cross-school analysis was conducted, where the analysis attempted to see processes and outcomes that occurred across

schools to identify trends and patterns and develop more sophisticated descriptions and explanations.

The data collection process was time consuming and needed concentration as the data were collected from several schools simultaneously, from different sources, and utilised different methods. The questionnaires, interviews, observation field-notes and documents collected generated a large amount of text for each school. In order to deal with the large volume of information generated, and to derive meaningful results, the materials were analysed and triangulated after each interview.

For the qualitative data, a variety of techniques were followed to analyse it, the objective being to identify themes and patterns embedded in the data. Interviews and the qualitative data from the questionnaires were carefully analysed looking for common themes and how many times an idea recurred was counted to give an indication of the strength of opinion. The field notes from school observation were drawn upon as required for clarifications of emerging findings. The interview transcripts, qualitative data from the baseline and post questionnaires and field notes were all coded by looking for the actions in the schools that supported or prevented the implementation of the SCBSI. Then the codes were reduced into thematic categories. Only these high level themes are reported in this thesis, due to limitations of space.

Qualitative data from questionnaires, interview transcripts, and observation field-notes, were coded. The data were coded on word documents to facilitate the retrieval and comparison of data, which contributed to themes' development. Then the codes were reduced into thematic categories.

The data were grouped into the six elements of the SCBSI. A format was developed to display all the relevant coded responses of all informants to allow an easy initial

comparison among responses and these findings in their entirety are made available in tabular form in the Appendix. Chapter 6 of the body of the thesis contains a systematic analysis done initially school by school, selecting only the significant (highest ranking) results for discussion. From this, a comparison of all schools was made. This allowed for further analysis to understand the influence of the SCBSI on students' achievement, and to measure each element's impact on teachers' practice. Once the analysis of each element was completed, cross-element analysis was conducted, providing evidence to consider each of the key research questions systematically.

## **5.11 Conclusion**

A case-study design was used to investigate the building of a model that improved schools' performance and had a positive impact on students' outcomes. One main research question, and four sub questions guided the study, seeking information about the conditions that might contribute to the successful implementation of the SCBSI model and the effect of this model on school performance and students' outcomes. Multiple research methods were identified to produce both qualitative and quantitative data and they included a baseline survey questionnaire; interviews; observation field work notes; documentary analysis; and a post survey questionnaire to establish progress made as a result of the intervention, supplemented with other sources of data such as National Examinations scores, and TIMSS scores.

Chapter Six which follows, presents the findings from each of the methods by school and then compares the emerging themes across all sites in the case-study. These findings will then be compared with similar research on school improvement identified in the international literature and discussed in Chapter Seven.



## **Chapter Six: Findings from the School Case-Study**

### **Introduction**

Four school sites under the auspices of the MoE in the KoB were selected as a case-study to provide insight into the way in which school capacity building towards sustainable excellence is enhanced and sustained. The four schools varied in their performance as learning institutions, according to the grades allocated by the QQA teams that did their first ever school reviews in 2008. This chapter reports on the results and findings accrued over a year by the researcher as participant observer, providing an account of the themes that emerged from an analysis of data from a range of stakeholders and sources, including surveys, interviews, meetings and documents. Each school is reported separately under five sections that cover the school context and staff perceptions pre intervention, intervention, and post intervention, in an attempt to throw light on the effectiveness of the SCBSI model with conclusions supported by quotations from various stakeholders or other evidence. For every school there is a discussion and summary of the main findings related to each element of the SCBSI model. The final section of the chapter brings all this together and discusses the findings across all the four school sites in the case-study. To respect schools' confidentiality and protect the anonymity of stakeholders in accordance with the ethical guidelines established by the British Education Research Association (2011), a pseudonym has been given to each of the schools and the participants are identified by codes.

## **6.1 Mohammed School**

### **School Context**

#### **6.1.1 Overview**

The ongoing visit record kept by the participant researcher indicated that Mohammed school is a primary boys' school established in the late 1960s. On first visiting the school as a member of the school Cluster Team, the initial impressions were that facilities were old and conditions were cramped because space was at a premium, so it was difficult even to find parking space, never mind the school being able to consider the new building projects that were sorely needed. Information supplied by the MoE indicated that the school has a multi-cultural student body and staff, as shown in Table 6.7 below, which summarises the key school demographics.

Specialist facilities available in the school included a computer laboratory, moderate learning resources centre, music room, art room, special education needs class, science laboratory and domestic sciences room. When this research commenced in 2012, it was found that the school had been graded as 2, which is considered to be 'Good', as a consequence of the review conducted in 2012 by the National Authority of Qualifications and Quality Assurance for Education and Training (National Authority of Qualifications and Quality Assurance for Education and Training, 2012b). This grading was lower than the previous review conducted in 2009, which had resulted in an overall effectiveness judged as 1, or 'Outstanding' (National Authority of Qualifications and Quality Assurance for Education and Training, 2009).

Table 6.7: Mohammed School Key Demographics

| <i>School's Name</i>   |              |                | <i>Mohammed School</i>   |                              |                              |                              |          |          |
|--|--------------|----------------|--|------------------------------|------------------------------|------------------------------|----------|----------|
| <i>School's type</i>   |              |                | Government   |                              |                              |                              |          |          |
| <i>Year of establishment</i>   |              |                | Late 1960s   |                              |                              |                              |          |          |
| <i>Age range of students</i>   |              |                | 6-11   |                              |                              |                              |          |          |
| <i>Grades (e.g. 1 to 12)</i>   |              |                | Primary 1 – 5  |                              |                              |                              |          |          |
| <i>Number of students</i>  |              |                | Boys 345   |                              |                              |                              |          |          |
| <i>Students' social background</i>   |              |                | They majority of students are from middle income families  |                              |                              |                              |          |          |
| <i>Classes per grade</i>   | <i>Grade</i> |                | <b>1</b>   | <b>2</b>                     | <b>3</b>                     | <b>4</b>                     | <b>5</b> | <b>6</b> |
|  |              | <b>Classes</b> | 2  | 2                            | 3                            | 3                            | 3        | -        |
| <i>Governorate</i>   |              |                | Capital  |                              |                              |                              |          |          |
| <i>Number of administrative staff</i>  |              |                | 6 administrative, 10 technical   |                              |                              |                              |          |          |
| <i>Number of teaching staff</i>  |              |                | 40   |                              |                              |                              |          |          |
| <i>Principal's tenure</i>  |              |                | Two years  |                              |                              |                              |          |          |
| <i>External assessment and examinations</i>  |              |                | QQA's National Examinations  |                              |                              |                              |          |          |
| <i>Number of students in the following categories according to the school's classification</i> |              |                | <b>Outstanding</b>   | <b>Gifted &amp; Talented</b> | <b>Physical Disabilities</b> | <b>Learning Difficulties</b> |          |          |
|  |              |                | 212  | 85                           | 3                            | 61                           |          |          |
| <i>Major recent changes in the school</i>  |              |                | - Grade 5 now consists of three classes instead of two previously, with a decreasing number in Grades 1 and 2 at two classes in the current academic year 2012-2013. |                              |                              |                              |          |          |
|  |              |                | - An increase in the percentage of students whose mother tongue is not Arabic, approximately now at 30 percent.  |                              |                              |                              |          |          |
|  |              |                | - The transfer of 100 students to X school two years ago.  |                              |                              |                              |          |          |

Source: National Authority of Qualifications and Quality Assurance for Education and Training (2012c).

A breakdown of the Review findings by area is shown in Table 6.8. This apparent drop in performance was of deep concern to the school as evidenced by the notes kept by the participant researcher (Visit Record), as the same standards were consistently applied over that period, and review personnel were very similar:

Table 6.8: *Mohammed School – QQA Review Judgments*

| <i>Aspect</i>   | <i>Grade: Description</i> |                       |
|---|---------------------------|-----------------------|
|   | <b>2009</b>               | <b>2012</b>           |
| <i>The school's overall effectiveness</i>                                     | <b>1: Outstanding</b>     | <b>2: Good</b>        |
| <i>The school's capacity to improve</i>                                       | <b>1: Outstanding</b>     | <b>1: Outstanding</b> |
| <i>Students' academic achievement</i>   | 2: Good                   | 2: Good               |
| <i>Students' personal development</i>   | 2: Good                   | 1: Outstanding        |
| <i>The quality of effectiveness of teaching and learning</i>                  | 2: Good                   | 2: Good               |
| <i>The quality of the curriculum implementation</i>                           | 1: Outstanding            | 1: Outstanding        |
| <i>The quality of the support and guidance for students</i>                   | 1: Outstanding            | 1: Outstanding        |
| <i>The quality and effectiveness of leadership, management and governance</i> | 1: Outstanding            | 1: Outstanding        |

As can be seen in Table 6.8, ‘students’ academic achievement’ and ‘the quality of effectiveness of teaching and learning’, which receive the highest weighting in considering a school’s overall effectiveness (National Authority of Qualifications and Quality Assurance for Education and Training, 2012b), were graded similarly, yet the school’s overall effectiveness had dropped. Whilst the QQA documentation explains how grades are awarded, the school SIT were unclear about this situation as evidenced by the notes kept by the participant researcher (Visit Record).

### **6.1.2 Pre-Intervention Survey**

The baseline survey was distributed to forty staff in September 2012 after gaining consent, yielding a response rate of 92.5 percent. However, not all questions were answered as the following section that covers all elements of the pre-intervention survey further discusses. The data gained from the survey are detailed in Appendix Chapter Six, where they are not included below.

#### **A. Committing to School Improvement**

The response rate for this section was 92.5 percent, apart from question three that recorded only 90 percent. Almost half of the respondents (44.6%) were committed to the notion of school improvement. A similar, but slightly lower percentage (40.5%), considered that Mohammed school had embedded well the practices required as part of the school improvement project that aimed to enhance current practice (**Appendix 6.20**). These findings were supported by comments added to the survey forms: "School improvement initiative will improve teaching and learning aspects...." (Pre/M/32).

More than half (52.8%) of respondents felt that it was well understood why the school was undergoing the process of improvement, as illustrated by the following quote also from the survey:

Teachers are fully aware of the improvement projects, so as the existence of workshops for the development of teachers, which reflect on explaining topics in classes and the use of teaching and learning strategies such as diversity of activities and the use of advanced methods and activities so as to develop the student (Pre/M/21).

Involvement in professional development was encouraged in Mohammed School, with almost all respondents agreeing that teachers implemented new teaching strategies to enhance school performance: As one teacher explained, professional development was collaborative, with Mohammed School "conduct[ing] workshops for teachers in the school and other schools and exchange[ing] class visits among teachers" (Pre/M/24).

## **B. School Diagnosis and Coherence**

The response rate for this section was 92.5 percent. Once again just under half (46.6%) of the respondents indicated that the school had well established practices for school diagnosis and coherence. Two fifths (40.5%) believed that the school involved staff in school planning and almost half (45.9%) of the respondents considered that the school was taking collective responsibility for individual students and school outcomes (**Appendix 6.21**), as illustrated by one teacher's comment: "We shared in writing the school vision and we shared with parents as well. We work in the strategic plan for the school. Discuss the results with the Cluster Team" (Pre/M/18).

Whilst it was clear that many teachers were involved in various aspects of day-to-day planning, not all teachers shared in planning for the school improvement and only selected individuals were chosen to create the strategic plan for the school, as the following quote shows: "Everyone is involved in writing the school vision through surveys and meetings. Not all teachers are involved in the development of plans only the strategic planning team" (Pre/M/21).

There were some associated issues raised in the survey, such as the fact that the Cluster Team had no facility to support the school with human resources development: "Cluster Team does not have absolute powers by the MoE to help school in all aspects especially in its needs of teachers and senior teachers" (Pre/M/20).

Although half of the respondents (45.9%) felt that the school had established conditions for teachers to assume collective responsibility for individual students and school outcomes, not everyone was in agreement: "We are not responsible for each student's results and school performance because this depends on the cooperation between the school and parents, because of the nature of students who come from different races environments and are mostly non-Arabic speakers" (Pre/M/33).

### **C. High Expectations**

The response rate for this section was 92.5 percent, apart from question one and two that recorded only 90 percent. Two fifths (40.4%) of the respondents considered that the school had high expectations, and a similar percentage (38.9%) believed that the school had well established the practice of thinking together about how to align their standards and programme of instruction and assessment with the vision (**Appendix 6.22**). They kept the school vision alive by encouraging students and staff to regularly engage with it in a variety of forums, as this quote illustrates:

Through putting the school vision in the files, repeat the vision from students during the morning assembly, through transfer of the experiences of some school teachers to each other, by attending class visits, supporting the strengths of each other and transfer of expertise (Pre/M/27).

Indeed, the ideas of utilizing exchange class visits as a way of teachers supporting each other was favoured by many and almost half (45.9%) of the respondents considered that the school had agreed strategies for teaching and learning, which centred round this approach: "Through periodic meetings with the teachers. Exchange class visits" (Pre/M/11).

## **D. Deep Learning**

The response rate for this section was 92.5 percent. Approximately two-fifths (43.2%) of respondents considered that the school had well established practices that resulted in deep learning. The same response rate (43.2%) indicated that the school had generally well established the practice of having professional development positively impacting on teacher practice and students' learning (**Appendix 6.23**), as illustrated by the following comments from another one of them: "The implementation of educational workshops and follow-up the impact in the classroom through the educational practices between students and teachers. Learning communities is purposeful to exchange experiences between schools and get the benefit from them" (Pre/M/37).

All respondents agreed that they were able to undertake suitable professional development workshops that suited their needs, and that they got continuous support to implement the strategies, as this quote illustrates: "Professional development is through workshops – classroom visits and provide support and guidance" (Pre/M/18).

Almost half (45.9%) of respondents believed that they had well established the practice of mapping their professional development sessions against the students' needs and aligned with the school goals.

## **E. Change Reaction**

The response rate for this section was 90 percent. Almost half of the respondents (49.3%) believed that the school had well established the practice of changing reaction. A greater percentage, accounting for nearly two-thirds (58.3%) of the respondents, believed that the school had established good support for the improvement initiatives in the school and could defend it (**Appendix 6.24**).



There were only a few qualitative responses added underneath this element and all were concerning the ways teachers work together, as one illustrated: "Through the preparation of a unified daily plan for all school teachers demonstrate differentiation in the corresponding educational activities and apply the recommendations of the Cluster Team" (Pre/M/27).

Although (58.3%) (being the highest percentage recorded in the baseline survey), of respondents indicated that they supported the improvement initiatives in the school and would work for it, they did not add any qualitative commentary.

#### **F. Share Success**

The response rate for this section was 90 percent, apart from question two, which recorded 87.5 percent and question three that recorded 95 percent. The school had well established the practice of sharing success, according to two-fifths (42.9%) of respondents, with nearly half (45.7%) agreeing that the school had embedded as an ongoing practice, the production of brochures to allow students to show their work (**Appendix 6.25**). There were a few qualitative responses in this element and all were commenting on the ways the school plans were evaluated, as indicated by this representative feedback: "We review our work. There are periodically planned evaluations conducted by management on an ongoing basis and we are constantly showing student work and there are meetings on a regular basis to evaluate the plan" (Pre/M/27).

*To sum up:* Before the intervention, the School's data showed that the school improvement was focused on professional development and applying new teaching strategies as a means to enhancing students' achievement. They also mentioned that they got benefits from sharing with other schools, but they did not mention how. As they had established professional learning communities inside the school, it was somewhat surprising to see that

one respondent had stated that teachers were not responsible for enhancing students' results. The school vision and the strategic plan were shared, but it appeared from participants' comments that there was no evidence that they worked together achieving their vision, and neither were there any comments about ways of approaching the vision.

### **6.1.3 Intervention**

The data from the baseline survey was shared with the SIT members, after it was analysed. Data were shared on six different occasions, which matched the six elements of the SCBSI model. The SIT members acted accordingly and implemented actions to raise the percentage in each area, and to fill the gaps if any. The actions the school did to improve the school performance are included in the Appendices (**Appendix 6.26**).

Nine respondents participated in all interviews: They either held higher leadership positions, middle leadership positions, or were supporting staff. Mohammed School was very cooperative and staff worked together to enhance the school practice. *Appendix 6.27* shows some information about the respondents.

#### **A. Committing to School Improvement**

Interviewees were asked nine questions to gauge their perceptions about the process of committing to school improvement. They almost all believed that the efforts to improve school performance would develop current practices. However, some of them mentioned that school improvement was not progressing as well as had been hoped, because it needed documentation to guide practice. Other participants stated that the way the work was conducted was slow and that it did not support the improvement initiative.

"..., the school principal read things in detail and it took more time than expected and that hinders the achievement of the goals" (MNYA).

"Development is slow. There are some tasks move very slow because it needs signature from the school principal" (MRAJ).

On clarifying the meaning, it was revealed that the principal took time to process the administrative requirements required to make changes: Each change was required to have a formal request from completed, which the principal then needed to approve and sign. At the interview it was reported that there was a pile of papers requiring signature on the principal's desk.

Seventy-eight percent of the respondents stated that the purpose of the process of improving school performance was to enhance teachers' performance, while 44 percent of the responses stated the purpose was to enhance students' achievement, as illustrated by the following feedback:

"Improve students' results and raise the professionalism of teachers" (MMAA).

"Raising the level of students" (MMAZ).

All interviewees agreed that they were chosen to be members in the SIT members because of their position as middle leaders in the school. However, there was a diversity of opinions about the effectiveness of the SIT. Some of them saw their contribution to the process as ineffective because they did all the work by themselves, and teachers were not participating, while others saw their contribution as being effective.

"According to our position as senior teachers, and based on our abilities, it is an effective team"(MKES).

"According to our position, the team is effective. But the distribution of tasks was done without taking our approval" (MNYA).

"According to our position, the team is not effective. The team does not do anything on time. I completed the work for them" (MRAJ).

However, all interviewees believe that the process of improving school performance changed the culture of people in working together, but some of them were frustrated about the performance of the principal who, it seemed, worked mostly independently.

There are some tasks that we work together, but some of the work that was assigned to a team, but I do all the work. The work depends a lot on papers. You must meet the teachers because they think that all the work comes from the Cluster Team and not from the principal. They are dissatisfied about the improvement (MRAJ).

"Effective. But the school principal like to work alone and with a teacher ...."  
(MSHSZ).

On a meeting with the principal, she was willing to engage all teachers in the implementation, but she preferred working with some teachers because their willingness to implement the principal's plans were "limitless".

Responses suggest that the principal overworked teachers with things that were not related to the improvement project. The principal's slow work was affecting the process of the improvement.

"There is a pressure on teachers from the school more than from the Cluster Team"  
(MAMD).

"The Cluster Team is very cooperative, they don't pressure us and they make things easy" (MMAA).

On the other hand, interviewees believed that all teachers contribute significantly to the improvement of practices, and continued in the implementation of the improvement process. "Everyone works in the improvement process" (MMAZ).

But not all teachers were aware of and could explain the improvement projects accurately, as the following statements show:

"I do not think they can explain the improvement accurately, but they have an idea of the projects" (MKES).

"Yes, the vast majority have the knowledge" (MMAA).

In addition, all interviewees believed that the Cluster Team had a positive role to support the school in its improvement journey and they felt confident and comfortable in the implementation of the improvement process.

"Yes, solve any problem I faced" (MMJS).

"Yes, if I have a problem in training, the Cluster Team provides support" (MNYA).

"Yes, Cluster Team is supportive, polite with us and makes work simple" (MMAA).

"I feel comfortable"(MMAZ).

## **B. School Diagnosis and Coherence**

Interviewees were asked six questions pertaining to the issue of school diagnosis and coherence of approach towards school improvement. They shared the responsibility of achieving their school vision by conducting meetings, working collaboratively, and

implementing the Performance Management System. Starting from creating the school vision, they worked collaboratively to do that through meetings, surveys, and sharing with parents in that process.

"Surveys were sent to us to state our opinion and to choose the school vision" (MHKA).

"In a participatory manner and sharing with parents" (MKES).

However, when interviewees were asked about how to achieve the vision, they mentioned the same procedures they used in agreeing on it. Data showed that students rehearsed the school vision, and teachers knew it, without putting actions to achieve it. "The cooperation of everyone. Full meeting" (MMAA).

This response was also given for the ways teachers participated in the planning process for the school: "Through performance management system and the actions teachers put to enhance the performance" (MSHSZ).

On the other hand, the interviewees replied in general in response to the ways that school staff took responsibility for the results of each student and the results of the school in general.

"Through students' results and analysis of results" (MHKA).

"Each teacher is trying to raise the results. It is the primary concern of the school. And there is an improvement" (MKES).

The interviewees thought that the school principal was very cooperative, in contrast to the response got from the baseline survey.

"The school environment is interesting and the school principal supports all, and human relationships. School principal does not say negative things" (MMAZ).

"Stimulating and everyone works" (MMJS).

"School principal very cooperative. Provides assistance" (MSHSZ).

### **C. High expectations**

Interviewees were asked five questions. They agreed that their contribution to achieving the school vision would be through providing professional development sessions to teachers, their participation in the preparation of plans, and providing ideas for the school principal for implementation.

"Providing professional development sessions to teachers" (MAMD).

"Participation in the preparation of plans"(MHKA).

"Support teachers and specially the new ones" (MKES).

"Giving ideas and views of teachers and take them to the school principal to implement them" (MRAJ).

Interviewees indicated that they provided support and guidance to each other through meetings, incentives and rewards, and conducting collective visits.

"Investment strengths to meet the weaknesses among teachers" (MAMD).

"Take the needs to the school principal" (MHKA).

"Incentives and rewards to motivate them" MMAA).

"Through collective classroom visit to mentor and provide appropriate support" (MMAZ).

## **D. Deep Learning**

Interviewees were asked eight questions. The interviewees were divided in their responses as to the benefit they got from the professional learning communities. Some of them thought they were useful while others thought they were only for meetings.

"It is not a big advantage. Just a little meeting and mentioned mechanisms to do the work. On the ground I do not see that there is any progress. Such as cooperating schools (schools work together) the normal strategy we did before that we complained about. Ideas are not new and we can convey ideas to others without meeting" (MAMD).

"Transfer of expertise from their schools and to benefit from their experiences and can be applied in our schools" (MMAA).

With regard to the professional development programmes, interviewees indicated that they needed more programmes. However, one said that the link between the strategic plan and the professional development programmes was not there. That might be because the MoE delivered a package of professional development sessions to all schools regardless of their needs and their performance level.

"Each one works to a different direction. All pressure on teachers, without knowing where is its path. Strategic plan going in one direction and training is moving in the other direction" (MNYA).

However, the majority agreed that the school improvement team meetings were productive and they focused on improving school performance; without providing evidence for their opinion:

"The SIT meetings are fruitful and productive" (MRAJ).



In contrast, one thought that the meetings were very long and doubted their value:

"The meetings are long without any value. There may be some things that they need only actions, but the meeting takes very long time" (MNYA).

There was a diversity of thinking about how the professional development sessions were built on students' needs and compatible with the school goals.

"Senior teachers' professional development sessions raise students' achievement" (MAMD).

"The programme focuses on students' needs" (MHKA).

"Based more on teachers' needs" (MMAA).

All interviewees agreed that they shared, and involved others with, the new strategy they learned in the professional development programme via delivering a session to the teachers. They also mentioned that the professional development programmes had an impact on teachers' performance.

### **E. Change Reaction**

Interviewees were asked seven questions. They did not develop new methods to work together, all the methods they were using having been used before.

"The same methods and there is no new ways" (MHKA).

They also did not join any networks connected with schools in Bahrain or outside Bahrain. However, they talked about the school improvement to other schools who were with them in the Cluster Team.

"Yes, with other schools and pass on the experience of others" (MMAZ).

## **F. Share Success**

Interviewees were asked four questions. They agreed that they regularly checked their plans, but each in a different way.

"Yes. On an ongoing basis and that was tiring" (MKES).

"Our plan is assessed each end of year" (MSHSZ).

The interviewees mentioned lots of names of brochures and productions such as leaflets about the school activities.

"Weekly bulletins and brochures" (MAMD).

"Brochures about the improvement projects and leaflets for events projects" (MSHSZ).

Interviewees all agreed that they conducted meetings to review the school strategic plan through board meetings, or SIT meetings.

"Through the board member meeting" (MMAA).

*To sum up:* At a follow up meeting with the SIT, interviewees agreed that they would write behavioural actions to achieve the school vision so that all staff could begin to work toward this. They also said that they would address all the recommendations from the QQA in the strategic plan, and provide support and guidance to teachers rather than just conducting class observations. Finally, they said that they would prepare an induction resource kit for the new teachers. It was proposed that the kit would contain rules and regulations of the school, a copy of the strategic plan and action plan with key performance indicators, and timetable. The aim was to provide the new teachers with documents to understand the educational situation of the school and its plans.

During the intervention the School participants' feedback showed that respondents were deluged with paperwork and this workload affected the time available for planning and monitoring teaching improvement. Staff thought that this situation had arisen because of the way the school principal was approaching the SIP rather than the school improvement itself. This response may also have been because members were chosen to be on the SIT team because of their position rather than because of their interest. If selection had been on the basis of interest, commitment, and members had been convinced of the benefit of the school improvement process, this might have increased the SIT's commitment to the improvement.

Unlike the response in the baseline survey, at this stage of the implementation the majority of the interviewees thought that the school principal was very cooperative. The difference might be because the interviewees themselves, as the SIT members had closely worked with the school principal who had had weekly meetings with them. In contrast to the respondents of the baseline survey, many teachers were engaged most of their time inside classes and they were not in the loop as to the big picture of the implementation. Moreover, interviewees believed that the Cluster Team support had a positive impact on the improvement process. This might be because the Cluster Team sometimes liaised between the teaching staff and the school senior management. Whilst the school vision was routinely repeated by the students, there were no actions in place to achieve it. Finally, the majority of professional development sessions were provided by the MoE and not tailored to the school needs.

### **6.1.4 Post Intervention Survey**

The post survey was distributed to forty staff in June 2013 yielding a response rate of 85 percent. However, not all questions were answered as the following sections discuss further. The data gained from the survey are detailed in Appendix Chapter Six, where they are not included below.

#### **A. Committing to School Improvement**

The response rate for this section was 77.5 percent, apart from questions two and three that recorded an 80 percent response rate. Almost one third of the respondents (35.0%) were committed to the notion of school improvement, but a slightly higher percentage (45.2%), believed that Mohammed school had embedded well the practices required as part of the school improvement project that aimed to enhance current practice (**Appendix 6.28**). Two respondents stated that teachers were improving their practices through implementing new teaching strategies, attending professional development sessions and exchanging class visits.

"Through the development of educational strategies and the improvement which have been done to the school" (Post/M/17).

"Through the preparation of workshops on strategies for learning and the exchange of educational experiences through mutual visits between the schools" (Post/M/28).

#### **B. School Diagnosis and Coherence**

The response rate for this section was 85 percent. Once again half (50.0%) of the respondents indicated that the school had well established the practice of school diagnosis and coherence. The majority (70.6%) of respondents considered that the school was taking collective responsibility for individual students and school outcomes (**Appendix 6.29**).

### **C. High Expectations**

The response rate for this section was 85 percent. Two-thirds (60.3%) of the respondents considered that the school had high expectations, and a slightly higher percentage (67.6%) believed that the school had agreement on improved strategies for teaching and learning (**Appendix 6.30**).

### **D. Deep Learning**

The response rate for this section was 85 percent. More than a third (39.7%) of the respondents believed that the school had well established practices that would lead to deep learning. Half (50%) of the respondents considered that the school had generally established the practice of linking the professional development with the ongoing support (**Appendix 6.31**). Respondents stated that the professional development impacted positively on their teaching, as illustrated by the following comments from one of them: "Professional development impact in raising the level of the teachers in the classroom practices; which made more aware of the development of class room teaching awareness" (Post/M/17).

### **E. Change Reaction**

The response rate for this section was 85 percent. Slightly lower than half (41.9%) of the respondents considered that the school had well established the practice of change reaction, and half (50%) of the respondents felt that the school had well established the practice of talking about the improvement initiatives to other parties (**Appendix 6.32**).

### **F. Share Success**

The response rate for this section was 85 percent. The school had well established the practice of sharing success, according to two-fifths (42.2%) of respondents, with slightly

higher than half (58.8%) of the respondents agreeing that the school had embedded as an ongoing practice, the production of brochures to allow students to show their work (**Appendix 6.33**).

Above all, students made good academic progress as shown by the average results in the final school internal exams. First Cycle (**Appendix 6.34**) students' results in the academic year 2012/2013, the year of intervention, progressed by 1.21 percent compared with the academic year 2011/2012. While Second Cycle (**Appendix 6.35**) students' results in the academic year 2012/2013 progressed by 3.26 percent compared with the previous academic year (2012/2013) although it will be noted that school internal exams were not moderated for national consistency.

In contrast, that same academic progress was not generally evident in the National Examination results (**Appendix 6.36**), with grade 3 Mathematics rising by only 0.1 percent and Arabic declining by 0.7 percent.

*To sum up:* After the intervention, respondents wrote few qualitative comments, possibly because they had many tasks to complete for the MoE before the school closed for the term.

### **6.1.5 Summary**

The case-study of Mohammed School indicated that the school had made some progress in the implementation of the SCBSI model. The teachers seemed committed to building the school capacity for improvement, they assumed leadership roles and participated actively in decision-making on issues related to professional development strategies, school vision, and they were sharing some for the responsibility of students' outcomes. Teachers explained how they shared ideas, exchanged class visits and reflected on teaching practices,

but they did not generally exhibit praxis, or reflection on students' learning. There was a level of anxiety amongst some of the teachers who were keen to bring about greater and more rapid changes within the school but who felt they were frustrated by their workloads and held up by the bureaucratic administration approvals process. Some teachers liked the principals' way of working and said she was very motivated, considerate and supportive. In contrast, others complained about the slowness in conducting the work needed to make improvement and the difficulties encountered, whereby they were asked to do things that were not needed. Staff believed that Mohammed School was developing a culture of collaboration and trust, although the role of teachers in students' learning and achievement appeared not to be central to decision making. However, intensive work was being done through teachers' professional development. Mohammed School was at the beginning of the school improvement initiative and its story illustrates the point that time is needed for staff to reach a common understanding about that the school improvement initiative that was being implemented to enhance students' outcomes. The findings show Mohammed School was still in the process of developing professional learning communities and consequently, while there was a continual drive for improvement, it was fragmented with no clear mechanisms to achieve the school vision. On the positive side, the external support from the Cluster Team was highly appreciated and the school appeared to have a high level of internal capacity for further improvement.

One of the respondents stated that she did not know the reasons for the process of the school improvement, though the interviewee was a member of the SIT, whose role it was to support the change. This rather surprising response might be because the participant was working in two different schools, two days in Mohammed School and three days in another school, and raises questions about commitment and accountability as factors in the success of school improvement initiatives. It also added to the evidence emerging from the analysis

of Mohammed School data, which was that sustained improvement requires collaborative working as well as a level of external support.

The six elements will be now analysed in turn, examining the difference between baseline and post-intervention data, utilising mean scores for each item.

### A. Committing to School Improvement

Table 6.9: *Mohammed School - Progress in Items Average Results – Committing to School Improvement*

| <i>Committing to School Improvement</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|---|-----------------|-------------|---------------|
| 1. <i>believe the improvement effort will enhance current practice</i>  | 3.27            | 3.55        | 0.28          |
| 2. <i>know what we want to achieve from the process of the improvement</i>  | 3.41            | 3.81        | 0.41          |
| 3. <i>know the reason for undergoing the process of the improvement</i>   | 3.56            | 3.84        | 0.29          |
| 4. <i>change the culture of how people operate together</i>   | 3.68            | 3.42        | -0.26         |
| 5. <i>teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school</i> | 3.49            | 3.74        | 0.26          |
| <b><i>Average</i></b>   | <b>3.48</b>     | <b>3.68</b> | <b>0.20</b>   |

The data from the baseline and post-intervention surveys show that there was a slight improvement in the average results of the element, as shown in *Table 6.9*.

Respondents believed that they knew what they wanted to achieve from the process of the school improvement. There was an average progression of 0.41 from the baseline survey average result (3.41) to the post survey average result (3.81).



## B. School Diagnosis and Coherence

Table 6.10: *Mohammed School - Progress in Items Average Results – School Diagnosis and Coherence*

| <i>School Diagnosis and Coherence</i>  | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>Share and understand the school vision</i>   | 3.84            | 4.06        | 0.22          |
| 2. <i>Know the function of the support we get from the Cluster Teams</i>                   | 3.41            | 4.03        | 0.62          |
| 3. <i>All actively involved in school planning processes</i>                               | 3.54            | 3.91        | 0.37          |
| 4. <i>All assume collective responsibility for individual students and school outcomes</i> | 3.49            | 3.79        | 0.31          |
| <b><i>Average</i></b>  | <b>3.57</b>     | <b>3.95</b> | <b>0.38</b>   |

The data in Table 6.10 show that there is a slight progress in the average result of the element, from the baseline survey to the post one.

Respondents considered that they knew the function of the support that got from the Cluster Team. There was an average progression of 0.62 from the baseline survey average result (3.41) to the post survey average result (4.03).

## C. High Expectations

Table 6.11: *Mohammed School- Progress in Items Average Results – High Expectations*

| <i>High Expectations</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 3.28            | 3.56        | 0.28          |
| 2. <i>keep our vision alive by reviewing it regularly</i>  | 3.64            | 4.06        | 0.42          |
| 3. <i>agreed on strategies for teaching and learning</i>   | 3.92            | 3.88        | -0.04         |
| 4. <i>reinforce each other's strengths in our core work</i>  | 3.73            | 3.76        | 0.03          |
| <b><i>Average</i></b>  | <b>3.64</b>     | <b>3.82</b> | <b>0.17</b>   |

The data shown in Table 6.11 indicates that there was slight progress in the average result of the element from the baseline survey to the post one.

Respondents believed that they kept the school vision alive by reviewing it regularly. There was an average progression of 0.42 from the baseline survey average result (3.64) to the post survey average result (4.06).

#### **D. Deep Learning**

Table 6.12: *Mohammed School - Progress in Items Average Results – Deep Learning*

| <b><i>Deep Learning</i></b>   | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|---|------------------------|--------------------|----------------------|
| 1. <i>have professional learning communities</i>  | 3.51                   | 3.97               | 0.46                 |
| 2. <i>our professional development is based on student needs and aligned with school goals</i>              | 3.51                   | 4.09               | 0.57                 |
| 3. <i>our professional development focuses on ongoing support rather than one-shot workshops</i>            | 3.76                   | 3.65               | -0.11                |
| 4. <i>our professional development is having a positive impact on teacher practice and student learning</i> | 3.59                   | 4.03               | 0.43                 |
| <b><i>Average</i></b>   | <b>3.59</b>            | <b>3.93</b>        | <b>0.34</b>          |

The data in Table 6.12 show that there is a slight progress in the average result of the element from the baseline survey to the post one.

Respondents felt that the staff professional development programme was based on student needs and aligned with the school goals. There was an average progression of 0.57 from the baseline survey average result (3.51) to the post survey average result (4.09).

## E. Change Reaction

Table 6.13: Mohammed School - Progress in Items Average Results – Change Reaction

| <i>Change Reaction</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>have developed new ways to work together</i>                               | 3.67            | 3.76        | 0.10          |
| 2. <i>share professional practices and refine through feedback mechanisms</i>    | 3.89            | 3.82        | -0.07         |
| 3. <i>support the improvement initiatives in our school and can stand for it</i> | 3.83            | 4.09        | 0.25          |
| 4. <i>can talk about it the improvement initiatives to other parties</i>         | 3.86            | 4.15        | 0.29          |
| <b><i>Average</i></b>  | <b>3.81</b>     | <b>3.96</b> | <b>0.14</b>   |

The data in Table 6.13 show that there is a slight progress in the average result of the element from the baseline survey to the post one.

Respondents believed that they could talk about the improvement initiatives to other parties. There was an average progression of 0.29 from the baseline survey average result (3.86) to the post survey average result (4.15).

## F. Share Success

Table 6.14: Mohammed School - Progress in Items Average Results – Share Success

| <i>Share Success</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>review our work periodically</i>                           | 3.81            | 4.00        | 0.19          |
| 2. <i>produce ongoing brochures and students show their work</i> | 3.77            | 3.76        | -0.01         |
| 3. <i>scheduled meeting to evaluate the strategic plan</i>       | 3.56            | 4.00        | 0.44          |
| <b><i>Average</i></b>  | <b>3.71</b>     | <b>3.92</b> | <b>0.21</b>   |

The data in Table 6.14 show that there was slight progress in the average result of the element from the baseline survey to the post one.

Respondents indicated that they had scheduled meetings to evaluate the strategic plan, with an average progression of 0.44 from the baseline survey average result (3.56) to the post survey average result (4.00)

## G. National Examination

Table 6.15: *Mohammed School - Students National Examinations Performance Score – 3<sup>rd</sup> Grade*

| <i>Subject/Year</i> |            | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <b><i>2013</i></b> | <i>2014</i> |
|---------------------|------------|-------------|-------------|-------------|-------------|--------------------|-------------|
| <i>Arabic</i>       | <i>3rd</i> | 3.3         | 4.1         | 3.2         | 2.5         | <b>1.8</b>         | 2.2         |
| <i>Math</i>         | <i>3rd</i> | 3.7         | 4.7         | 3.3         | 1.8         | <b>1.9</b>         | 2.1         |

The data in Table 6.15 show that the National Examinations performance scores were raised in mathematics and deteriorated in Arabic.

However, the progress in the students' performance scores in Arabic cannot be directly linked to the implementation of the SCBSI model as students' learning is affected by multi dimension factors.

## **6.2 Bader School**

### **Context of the School**

#### **6.2.1 Overview**

Bader school is a primary boys' school established in the early 1970s. On first visiting the school as a member of the Cluster Team, the visit record kept by the researcher indicated that this school was considered as one of the best government schools in regards students' attendance rates over the preceding academic year. Information supplied to the MoE indicated that the school was homogeneous in regards ethnicity of students. Other demographic data are shown in Table 6.16.

Bader School is situated in a village where all the students know each other. The initial impressions were that facilities were old, though the school buildings were attractive and provided a stimulating learning environment because of the drawings and colourful touches in almost all areas of the school. Specialist facilities available in the school included a computer laboratory, moderate learning resources centre, art room, special education needs class, science laboratory, and domestic sciences room. Almost all the school staff are Bahraini people except one teacher. In 2011 the school had been graded as 3, which is considered to be 'Satisfactory', as a consequence of the QQA review conducted in 2011 (National Authority of Qualifications and Quality Assurance for Education and Training, 2011a). This grading was the same as the previous review conducted in 2008 (National Authority of Qualifications and Quality Assurance for Education and Training, 2008a).

Table 6.16: *Bader School Key Demographics*

| <i>School's Name</i>   |                    | <i>Bader School</i>   |          |                              |          |                              |          |
|--|--------------------|---|----------|------------------------------|----------|------------------------------|----------|
| <i>School's type</i>   |                    | Government  |          |                              |          |                              |          |
| <i>Year of establishment</i>   |                    | Early 1970s   |          |                              |          |                              |          |
| <i>Age range of students</i>   |                    | 6 – 12 years  |          |                              |          |                              |          |
| <i>Grades (e.g. 1 to 12)</i>   |                    | Primary 1 – 6   |          |                              |          |                              |          |
| <i>Number of students</i>  |                    | Boys 398  |          |                              |          |                              |          |
| <i>Students' background</i>  | <i>social</i>      | Majority of students belong to middle income families   |          |                              |          |                              |          |
| <i>Classes per grade</i>   | <b>Grade</b>       | <b>1</b>  | <b>2</b> | <b>3</b>                     | <b>4</b> | <b>5</b>                     | <b>6</b> |
|  | <b>Classes</b>     | 3   | 2        | 2                            | 2        | 3                            | 2        |
| <i>Number of administrative staff</i>  |                    | 6   |          |                              |          |                              |          |
| <i>Number of teaching staff</i>  |                    | 34  |          |                              |          |                              |          |
| <i>Principal's tenure</i>  |                    | Two years   |          |                              |          |                              |          |
| <i>External assessment and examinations</i>  |                    | QQA National Examinations   |          |                              |          |                              |          |
| <i>Number of students in the following categories according to the school's classification</i> | <b>Outstanding</b> | <b>Gifted &amp; Talented</b>  |          | <b>Physical Disabilities</b> |          | <b>Learning Difficulties</b> |          |
|  |                    | 30  | -        | -                            |          | 47                           |          |
| <i>Major recent changes in the school</i>  |                    | - Promoting a senior class teacher to an assistant principal, and transferring him to another school for the current school year 2011 – 2012<br><br>- Two teachers of primary subjects joined the school in the year 2011 – 2012. |          |                              |          |                              |          |

Source: National Authority of Qualifications and Quality Assurance for Education and Training (2011a).

A comparison of the Review findings by area is shown in Table 6.17.

Table 6.17: *Bader School – Comparison of QQA Review Judgements 2008 /2011*

| <i>Aspect</i>   | <i>Grade: Description</i> |                        |
|---|---------------------------|------------------------|
|   | <b>2008</b>               | <b>2011</b>            |
| <i>The school's overall effectiveness</i>                                     | <b>3: Satisfactory</b>    | <b>3: Satisfactory</b> |
| <i>The school's capacity to improve</i>                                       | <b>3: Satisfactory</b>    | <b>2: Good</b>         |
| <i>Students' academic achievement</i>   | 3: Satisfactory           | 3: Satisfactory        |
| <i>Students' personal development</i>   | 3: Satisfactory           | 2: Good                |
| <i>The quality of effectiveness of teaching and learning</i>                  | 3: Satisfactory           | 3: Satisfactory        |
| <i>The quality of the curriculum implementation</i>                           | 3: Satisfactory           | 2: Good                |
| <i>The quality of the support and guidance for students</i>                   | 3: Satisfactory           | 2: Good                |
| <i>The quality and effectiveness of leadership, management and governance</i> | 3: Satisfactory           | 2: Good                |

As can be seen in Table 6.17, 'students' academic achievement' and 'the quality of effectiveness of teaching and learning', which receive the highest weighting in considering a school's overall effectiveness (National Authority of Qualifications and Quality Assurance for Education and Training, 2012b), were graded similarly, and this consequently resulted in an overall grading for the school overall effectiveness as 'Satisfactory'.

## 6.2.2 Pre-Intervention Survey

The baseline survey was distributed to thirty-four staff in October 2012 after gaining consent, and it yielded a response rate of 100 percent, with all questions answered as the

following section indicates. The data gained from the survey are detailed in Appendix Chapter Six, where they are not included in the discussions on each element below.

### **A. Committing to School Improvement**

The response rate for this section was 100 percent. More than a third of the respondents (39.4%) were committed to the notion of school improvement, and more than half (52.9%), considered that Bader was making good progress in knowing what the school staff want to achieve from the process of the improvement (**Appendix 6.37**), a finding supported by comments such as: "Make an effort to improve learning strategies such as ice-breaker, and the use of differentiated learning strategy. Implement teaching strategies other than lecturing" (Pre/B/6).

In addition, a good number of respondents believed that, with the current school improvement initiatives supported by the Cluster Team, students' achievement would be better, as illustrated by the following quotes taken from the survey:

The QQA visited the school and the school was graded as "Satisfactory" and improvement efforts in the school will level up to the best level of improvement as the Cluster Team is working on the development of learning strategies which will raise the students' achievement (Pre/B/15).

Several respondents indicated that they knew the purpose of the improvement initiatives, as illustrated by one teacher's comment: "Make students the focus of the learning process through mutual questions between the student and the teacher. Use of technology in the education process" (Pre/B/17).



Some suggested that the Cluster Team should communicate directly with school staff about the improvement initiatives, whilst others signalled that the improvement initiative was time and effort consuming:

"To establish communication between the Cluster Team and the school staff about the improvement projects" (Pre/B/12).

"Teachers spare no effort to comply with the process of improvement, which needs time to achieve its objectives. A sign of a great burden on the teacher beside there is a shortage in staff" (Pre/B/31).

## **B. School Diagnosis and Coherence**

The response rate for this section was 100 percent. Almost half (47.1%) of the respondents indicated that the school had well established practices for school diagnosis and coherence. Two-thirds (67.6%) believed that the school was taking collective responsibility both for individual students and the whole school community (**Appendix 6.38**), as illustrated by one teacher's comment:

Meetings were held to create a clear vision. We also consulted the Cluster Team and discussed with them the vision. We adopted many of the teachers' views on the strategic planning. Teachers put plans to raise the level of their students and therefore they are responsible for it (Pre/B/16)

A few respondents claimed that teachers' participation in school planning was restricted to shorter term plans and almost not existent in determining of longer term strategies, as the following quote shows: "Teachers participation in strategic planning is almost non-existent but teachers participate in the preparation of the quarterly plan and daily plan" (Pre/B/6).

In contrast, a good number of respondents indicated that they actively participated in the school's planning, including development of the school's vision:

By analysing the survey results and work tests, and comparing the results with previous years' results, the improvement plans are built. The school vision was distributed to teachers to discuss it and say their opinions. Then we discussed with the senior teacher the school strategic plan and we built the department plan on the school plan (Pre/B/14).

A good number of respondents agreed that the school principal was very supportive and motivated teachers for the change, as this quote illustrates: "Good change in the preparation of the plan. Continuous prodding by the school principal and school administration" (Pre/B/29).

### **C. High Expectations**

The response rate for this section was 100 percent, with one third (34.6%) of the respondents considering that the school had high expectation, and half (50%) indicating that the school was making good progress in agreeing on strategies for teaching and learning (**Appendix 6.39**) as this quote illustrates: "Conduct continuous meetings between the senior teacher and the teachers in the department, to share practices in educational strategies, and know about other departments' practices" (Pre/B/14).

Furthermore, respondents linked their work in professional development with the school vision, though the school vision focused on raising students' achievement in the National Examinations:

"Develop the learning strategies in order to achieve the vision of the school, and the teachers discuss with each other and exchange class visits to support each other" (Pre/B/15).

Finally, almost all respondents used discussions and meetings to conduct their work on the school improvement initiative, as one teacher's comment illustrated: "Ongoing discussion and review of the concept and vision of the school that by holding regular meetings among teachers" (Pre/B/28).

#### **D. Deep Learning**

The response rate for this section was 100 percent. Approximately two-fifths (44.9%) of respondents considered that the school had well established practices that resulted in deep learning. More than half (58.8%) of respondents considered that the school was making good progress in matching the professional development with the students' needs and aligned with the school goals (**Appendix 6.40**), as illustrated by the following comments from one teacher:

Training and professional development commission are working to provide training sessions and workshops for new comers and teachers constantly according to their needs. Improve the level of education and achievement among students as a results of the positive development of professional performance on education practices and students learning (Pre/B/34)

In addition, professional learning communities and discussion groups were implemented and used to enhance the schools' performance, according to one teacher: "Participate in learning communities among the school staff. Attend all the professional development workshops" (Pre/B/23).

#### **E. Change Reaction**

Again, the response rate was 100 percent, with almost half of the respondents indicating that the school was making good progress in the practice of change reaction (48.5%), and

in developing new ways to work together (52.9%) (**Appendix 6.41**), as illustrated by the following comments from some teachers:

"Through the developments that took place in the school in teaching methods, school environment, strategic plans and school improvement projects" (Pre/B/14).

"Develop the system of some of the meetings and apply field visits to the school facilities. Discussion sessions were held after the field visit. School supports all the school improvement initiative and create the appropriate conditions for that purpose" (Pre/B/16).

#### **F. Share Success**

The response rate for this section was 100 percent. The school had well established the practice of sharing success, according to two-fifths (41.2%) of respondents, with almost half (47.1%) agreeing that the school had embedded, as an ongoing practice, the production of brochures to allow students to show their work. The same percentage of respondents considered that the school had well established the practice of reviewing its work periodically (**Appendix 6.42**), as indicated by this representative feedback:

"Issuing bulletins containing innovative ways to develop the teaching and learning process. Put students' work in the corridors of the school in order to highlight their superiority in order to create a competitive atmosphere among them" (Pre/B/28).

Respondents also mentioned that there were regular meetings to review student's work and to act accordingly to change their plans to meet identified needs as illustrated by some teachers:

"School performance is reviewed periodically by the board members. Issue weekly school newsletter containing images of a variety of events. There are meetings at various levels to assess the plan" (Pre/B/16).

"Periodically reviewing our work through the discussion in the board meeting, documenting the work of students in the morning assembly, classrooms, and school corridors. Inform parents of school activities through meetings and by other means" (Pre/B/21).

*To sum up:* Before the intervention, the school's data showed that the school improvement was focused on professional development, applying new teaching strategies and enhancing students' achievement. The school staff conducted regular meetings to review their work and worked collaboratively in almost each task to agree on, and achieve it.

### **6.2.3 Intervention**

After analysis, the data from the baseline survey was shared with the SIT members. Data were shared on six different occasions, which matched the six elements of the SCBSI model. The SIT members identified and implemented actions to fill the gaps if any. (**Appendix 6.43**) shows the actions the school took to improve the school performance. Nine respondents participated in all interviews and they held senior leadership positions, middle leadership positions, or were support staff as shown in **Appendix 6.44**. Bader School was very cooperative and staff worked together to enhance the school practice.

#### **A. Committing to School Improvement**

Interviewees were asked nine questions to gauge their perceptions about the process of committing to school improvement. They believed that the efforts to improve school

performance would develop current practices. However, some of them mentioned that school improvements were not progressing as well as had been hoped for, and it was suggested that this was because the way the improvement programmes were being managed was not effective, as illustrated by the following teacher comments:

"Of course, certainly students are progressing. Based on student's results there is a big difference" (BHKE).

"Yes, great efforts. The improvement is little because of the project management method which needs to be reconsidered" (BEAA).

Sixty-seven percent of the respondents stated that the purpose of the process of improving school performance was to enhance teachers' performance, while 33 percent stated the purpose was to enhance students' achievement: "Improve the educational outcomes in classrooms in the National Examinations" (BAJE).

All interviewees agreed that they were chosen to be in the SIT because of their effectiveness in the school, as illustrated by one: "The selection of project leaders was based on those who have influence on the teachers and the qualified ones" (BHMF).

However, they believed that changing people's mind-set to accept the improvement initiative was not an easy task: "Project leaders have the conviction and the ability to conduct the improvement. Teachers do not. This needs additional work from project leaders without payment" (BHMF).

However, not all teachers were aware of and could explain the improvement projects accurately, as illustrated by the following comment: "Teachers know the names of the improvement programmes. Some teachers do not know the detail about the programmes" (BMH).

On the other hand, interviewees indicated that the Cluster Team can support the school to make the desired progress to some extent:

"Cluster Team maintains programmes in the school and its contributions is limited" (BAHK).

"Yes, definitely" (BAJE).

In addition, interviewees felt positive about their work, but they were overworked. They also thought that their work was different from previous years: "There is a big difference. A positive difference. ..." (BAJE).

## **B. School Diagnosis and Coherence**

Interviewees were asked six questions pertaining to the issue of school diagnosis and coherence. They shared the responsibility of achieving their school vision by conducting meetings, working collaboratively working, and sharing with parents. Starting from creating the school vision, they worked collaboratively to do that: "Through the team work. The participation of all staff" (BAES).

Not all interviewees knew the type of support they got from the Cluster Team, but teachers share in school planning: "Through meetings between the top leadership and the middle leadership; which then the middle leadership take the information and share with the teachers" (BHKE).

In addition, all the interviewees shared the responsibility for raising students' results: "There is a plan for it. With the participation of everyone in the plan, they are responsible for the students' achievement" (BAHK).

The interviewees thought the school environment was positive and even if one lacked the needed skills, no one blamed them: "Middle and upper leadership take the role of encouraging us. Through meetings, they support everyone to achieve the objective. They listen to the suggestions, and ask teachers about their needs to make progress" (BAES).

### **C. High Expectations**

Interviewees were asked five questions. They were clear about how they achieved the school vision. They implemented different methods to do that, such as training teachers, training students, selecting the best teachers for students and conducting meetings, as just a few of the examples given: "We work on 6<sup>th</sup> grade students' achievement from 4<sup>th</sup> grade. We prepare them for the National Examinations. The preparation is also for teachers to select the best of them" (BAHK).

Furthermore, interviewees planned for the educational strategies through linking their needs to the school vision: "We link our work and professional development through teachers' needs and fulfil them; then link that to the National Examinations" (BAJE).

### **D. Deep Learning**

Interviewees were asked eight questions. The interviewees believed that the professional learning communities were beneficial to the school: "To exchange experiences, and to the share the best practices" (BMH).

They were divided in their responses to the question that asked about the benefits that teachers gained from professional learning communities. Some of them thought learning communities were useful whilst others thought they were only for meetings. However, all agreed that the professional development programmes were too general and did not fully



address the school needs: "The Ministry addresses the needs of teachers in general, and the school addresses the needs of the teachers in specifics, but that is not enough" (BAHK).

Interviewees believed that the SIT meetings were useful and purposeful: "Lengthy and productive meetings where we display the students' results among departments and teachers. But need to follow up more" (BHMF).

In the response to how the professional development sessions were built on students' needs and compatible with the school goals, none of those interviewed answered the question specifically: "Not all programmes. There are programmes imposed on teachers from outside. Teacher are unwilling to implement these strategies" (BAYY).

All interviewees agreed that they shared and involved others with the new strategy they learned in the professional development programme. They also mentioned that the professional development programmes had an impact on teachers' performance: "Yes. It supports the students' achievement" (BAHK).

### **E. Change Reaction**

Interviewees were asked seven questions relating to change reaction, a term also commonly referred to as 'reflective practice. They believed that there was a good relationship amongst teachers because of their similar ages and this enabled them to work effectively together:

"Raise the level of job satisfaction and psychological satisfaction to motivate the teachers to work together. All departments work together because of the good relationships among them. Similar age of teachers contributed to that" (BAES).

Some of interviewees joined in a network connection with the neighbouring school to share some of their practices or attending school's events.

## **F. Share Success**

Interviewees were asked four questions. They agreed that they regularly check their plans:

"Ongoing review of all the work" (BMH).

The interviewees produced and distributed some bulletins that contained a variety of activities and information about the school projects: "Weekly bulletins. Some events have ready brochures" (BAJE).

They all agreed that they conducted meetings to review the school strategic plan through the board members, or SIT meetings, but there were also additional review meetings:

"There were unscheduled meetings to review the plan" (BMH).

*To sum up:* During the intervention, the school's data showed that one-third (33%) of the interviewees understood the purpose of the SIP. They were chosen to be leaders for the improvement projects because of their effective work and their ability to make things happen. Moreover, interviewees believed that the Cluster Team support had a positive impact on the improvement process. That might be because the Cluster Team had a strong relationship with the SIT. In addition, some interviewees practiced the vision in their daily work as it focused on raising students' scores in National Examinations. However, during a discussion meeting with the SIT, there were challenges made to the school vision. The school vision was focused on "raising students' scores in the National Examinations" and this had as a consequence, the effect of encouraging teachers to teach for the test, rather than for lifelong learning. Finally, the majority of professional development sessions were decided and delivered by the MoE and did not address school needs.

## **6.2.4 Post Intervention Survey**

A post survey was distributed to thirty-four staff in June 2013, yielding a response rate of 94 percent. All questions were answered as the following sections that cover all elements in the post intervention survey, discuss further. The data gained from the survey are detailed in Appendix Chapter Six where they are not included below.

### **A. Committing to School Improvement**

The response rate for this section was 94 percent. Two third of the respondents (63.1%) were committed to the notion of school improvement, but a slightly higher percentage (84.4%) believed that the school had embedded well the practices required as part of the school improvement project that aimed to enhanced current practices (**Appendix 6.45**).

"There are clear efforts from the Cluster Team and SIT to develop the school practices through their continued and effective visits" (Post/B/1).

"There is a clear improvement in the functioning of the educational process as a result of the great efforts made by the committees where improvement was clear against the desired objective, raising the professional development performance, improving teachers' performance, and providing a good learning environment for learners" (Post/B/4).

### **B. School Diagnosis and Coherence**

The response rate for this section was 94 percent. Two-thirds (65.6%) of the respondents indicated that the school had well established practices of school diagnosis and coherence. The majority (81.3%) of respondents considered that the school had well established practices for sharing and understanding the school vision, and assuming collective responsibility for individual students and school outcomes (**Appendix 6.46**);

The school vision is clarified from the school management team, and the type of the support from the Cluster Team is cleared. There is encouragement for everyone to positively participate, take part in the school planning and take the responsibility to raise the school and students' results (Post/B/4).

### **C. High Expectations**

The response rate for this section was 94 percent. Two-thirds (60.9%) of the respondents considered that the school had high expectations, although interestingly a slightly higher percentage (71.9%) believed that the school had well established the practices of leading to the improvement of teaching and learning (**Appendix 6.47**), as illustrated by the following: "Everyone collaborate[d] to achieve teaching and learning strategies and encourage each other to admire the strengths and address the weaknesses" (Post/B/4).

### **D. Deep Learning**

The response rate for this section was 94 percent. Two thirds (60.9%) of the respondents believed that the school had well established practices for deep learning. Three quarters (75%) of the respondents believed that the school's professional development programme had a positive impact on teacher practice and student learning (**Appendix 6.48**), as illustrated by the following feedback: "Workshops suit the needs of teachers and students" (Post/B/7).

### **E. Change Reaction**

The response rate for this section was 94 percent. Two thirds (60.2%) of the respondents considered that the school had well established the practice of change reaction, a term also commonly referred to as 'reflective practice. More than three quarters (81.3%) of respondents considered that the school had established sustainable practice in supporting

the improvement initiatives in the school (**Appendix 6.49**), as illustrated by the following comment: "We sit with teachers and management team after classroom visits to discuss and share feedback about the educational practices. New ways of making the break time active with involving students and teachers in various activities" (Post/B/10).

#### **F. Share Success**

The response rate for this section was 94 percent. The school had well established practices for sharing success, according to two thirds (66.7%) of respondents, with three quarters (75%) of respondents identifying that the school had well established practices for reviewing the work periodically (**Appendix 6.50**): "All teachers participated in the development of the school plan by setting the objectives and know[ing] the goals, vision, and mission of the school" (Post/B/31).

However, despite the feelings that the school was improving, there was little evidence to show that this had made a difference where it mattered most, in the classroom. The final school internal exams, though not externally moderated, were at almost the same level as the year previously, with First Cycle Grade (**Appendix 6.51**) results up by 0.5 percent compared with the academic year 2011/2012, while Second Cycle (**Appendix 6.52**) students' results for the academic year 2012/2013 deteriorated by 0.8 percent compared with the academic year 2012/2013. In the National Examinations performance scores detailed in **Appendix 6.53** and **Appendix 6.54**, there was a deterioration in the overall achievement levels across all subjects in grade three and six.

*To sum up:* After the intervention, the school's data showed that respondents believed that their current practices had been enhanced to a large extent. They shared the school vision and acted accordingly to achieve it. They shared the responsibility for students' and school outcomes, working collaboratively on tasks related to planning, professional development,

and reviewing their work. However, there was little evidence in the school and National Examinations that these initiatives were making a difference for learners and learning.

### **6.2.5 Summary**

The case-study of Bader School indicated that the school had progressed in the implementation of the SCBSI model to a large extent as was illustrated in this section. The school principal worked collaboratively with all staff in all the range of tasks related to the school improvement project. Teacher leadership was partly manifested through teachers' participation in decision-making, demonstrated by their participation in the SIT and other committee meetings where decisions were made and group reflection commonly practiced. Teachers' leadership activities were seen in their encouragement of others towards change and improved educational practice. The school vision was collectively developed by all school members. The school principal encouraged teachers to share and implement their viewpoints to enhance school practices. Collaborative teams seemed to be present at the school and were being established inside departments. In these professional learning communities, they reviewed the school work, gave feedback to each other to provide support and guidance for improvement, and they took collaborative decisions about school objectives. Improvement was becoming internally driven because it was part of the culture of the school and it seemed to have become a daily practice by teachers whose objective was to improve student learning and performance.

The six elements will now be analysed in turn, examining the difference between baseline and post-intervention data, utilizing mean scores for each item.

#### **A. Committing to School Improvement**

Table 6.18: *The Progress in Items Average Results – Committing to School Improvement*

| <b><i>Committing to School Improvement</i></b>  | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|---|------------------------|--------------------|----------------------|
| 1. <i>believe the improvement effort will enhance current practice</i>  | 3.24                   | 3.84               | 0.61                 |
| 2. <i>know what we want to achieve from the process of the improvement</i>  | 3.32                   | 3.66               | 0.33                 |
| 3. <i>know the reason for undergoing the process of the improvement</i>   | 3.53                   | 3.78               | 0.25                 |
| 4. <i>change the culture of how people operate together</i>   | 3.35                   | 3.59               | 0.24                 |
| 5. <i>teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school</i> | 3.32                   | 3.31               | -0.01                |
| <b><i>Average</i></b>   | <b>3.35</b>            | <b>3.64</b>        | <b>0.28</b>          |

The data in Table 6.18 show that there was a slight progress in the average results of the element, from the baseline survey to the post one.

Respondents believed that the improvement effort would enhance the current practices.

There was an average progression of 0.61 from the baseline survey average result (3.24) to the post survey average result (3.84).

## **B. School Diagnosis and Coherence**

Table 6.19: *The Progress in Items Average Results – School Diagnosis and Coherence*

| <b><i>School diagnosis and coherence</i></b>   | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|--|------------------------|--------------------|----------------------|
| 1. <i>Share and understand the school vision</i>   | 3.47                   | 3.81               | 0.34                 |
| 2. <i>Know the function of the support we get from the Cluster Teams</i>                   | 3.41                   | 3.50               | 0.09                 |
| 3. <i>All actively involved in school planning processes</i>                               | 3.41                   | 3.88               | 0.46                 |
| 4. <i>All assume collective responsibility for individual students and school outcomes</i> | 3.74                   | 3.84               | 0.11                 |
| <b><i>Average</i></b>  | <b>3.51</b>            | <b>3.76</b>        | <b>0.25</b>          |

The data in Table 6.19 show that there was progress being made in the SIP, evidenced by a slight increase in the average result of the element, from the baseline to the post survey.

Respondents considered that there was active involvement in school planning processes. There was an average progression of 0.46 from the baseline survey average result (3.41) to the post survey average result (3.88).

### C. High Expectations

Table 6.20: *The Progress in Items Average Results – High Expectations*

| <b><i>High Expectations</i></b>  | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|--|------------------------|--------------------|----------------------|
| <i>1. think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 3.21                   | 3.34               | 0.14                 |
| <i>2. keep our vision alive by reviewing it regularly</i>  | 3.29                   | 3.63               | 0.33                 |
| <i>3. agreed on strategies for teaching and learning</i>   | 3.32                   | 3.72               | 0.40                 |
| <i>4. reinforce each other's strengths in our core work</i>  | 3.53                   | 3.66               | 0.13                 |
| <b><i>Average</i></b>  | <b>3.34</b>            | <b>3.59</b>        | <b>0.25</b>          |

The data in Table 6.20 show that there was a slight progress in the average result of the element, from the baseline to the post survey.

Respondents agreed on strategies for teaching and learning, with an average progression of 0.40 from the baseline survey average result (3.32) to the post survey average result (3.72).



## D. Deep Learning

Table 6.21: *The Progress in Items Average Results – Deep Learning*

| <b>Deep Learning</b>   | <b>Baseline</b> | <b>Post</b> | <b>Change</b> |
|--|-----------------|-------------|---------------|
| 1. have professional learning communities  | 3.35            | 3.47        | 0.12          |
| 2. our professional development is based on student needs and aligned with school goals              | 2.94            | 3.47        | 0.53          |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 2.85            | 3.59        | 0.74          |
| 4. our professional development is having a positive impact on teacher practice and student learning | 3.29            | 3.72        | 0.42          |
| <b>Average</b>   | <b>3.11</b>     | <b>3.56</b> | <b>0.45</b>   |

The data in Table 6.21 show that there was a slight progress in the average result of the element, from the baseline to the post survey. Respondents believed that the professional development focused on ongoing support. There was an average progress increase of 0.74 from the baseline survey average result (2.85) to the post survey average result (3.59), indicating progress in implementation of the SIP.

## E. Change Reaction

Table 6.22: *The Progress in Items Average Results – Change Reaction*

| <b>Change Reaction</b>  | <b>Base L.</b> | <b>Post</b> | <b>Change</b> |
|---|----------------|-------------|---------------|
| 1. have developed new ways to work together                               | 3.18           | 3.47        | 0.29          |
| 2. share professional practices and refine through feedback mechanisms    | 3.15           | 3.72        | 0.57          |
| 3. support the improvement initiatives in our school and can stand for it | 3.59           | 3.81        | 0.22          |
| 4. can talk about it the improvement initiatives to other parties         | 3.29           | 3.53        | 0.24          |
| <b>Average</b>  | <b>3.30</b>    | <b>3.63</b> | <b>0.33</b>   |

The data in Table 6.22, show that there was only a slight increase in the average result of the element from the baseline to the post survey.

Respondents shared professional practices and refined what they did in the classroom through feedback mechanisms. There was an average increase of 0.57 from the baseline survey average result (3.15) to the post survey average result (3.72).

## F. Share Success

Table 6.23: *The Progress in Items Average Results – Share Success*

| <i>Share success</i>   | <i>Base L.</i> | <i>Post</i> | <i>Change</i> |
|--|----------------|-------------|---------------|
| <i>1. review our work periodically</i>                           | 3.44           | 3.75        | 0.31          |
| <i>2. produce ongoing brochures and students show their work</i> | 3.18           | 3.63        | 0.45          |
| <i>3. scheduled meeting to evaluate the strategic plan</i>       | 3.18           | 3.63        | 0.45          |
| <b><i>Average</i></b>  | <b>3.26</b>    | <b>3.67</b> | <b>0.40</b>   |

The data in Table 6.23 show that there was a slight increase in the average result of the element from the baseline survey to the post survey.

Respondents scheduled meetings to evaluate the strategic plan, with an average progression of 0.45 from the baseline survey average result (3.26) to the post survey average result (3.67)

## G. National Examinations

The data in Table 6.24 show that the performance score in the National Examinations in Grade 3 had deteriorated dramatically in all subjects.

Table 6.24: *Students National Examinations Performance Scores – 3<sup>rd</sup> Grade*

| <i>Subject/Year</i> |            | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <b><i>2013</i></b> | <i>2014</i> |
|---------------------|------------|-------------|-------------|-------------|-------------|--------------------|-------------|
| <i>Arabic</i>       | <i>3rd</i> | 3.3         | 4.1         | 3.4         | 3.3         | <b>1.6</b>         | 1.1         |
| <i>Math</i>         | <i>3rd</i> | 3.6         | 4.7         | 3.6         | 2.6         | <b>1.7</b>         | 1.4         |

The data in Table 6.25 show that the performance scores in the National Examinations in Grade 6 had deteriorated dramatically in all subjects.

Table 6.25: *Students National Examinations Performance Scores – 6<sup>th</sup> Grade*

| <i>Subject/Year</i> |            | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <b><i>2013</i></b> | <i>2014</i> |
|---------------------|------------|-------------|-------------|-------------|-------------|--------------------|-------------|
| <i>Arabic</i>       | <i>6th</i> | 2.8         | 3.7         | 2.2         | 1.6         | <b>1.5</b>         | 0.5         |
| <i>Math</i>         | <i>6th</i> | 3.0         | 4.2         | 2.9         | 2.2         | <b>1.2</b>         | 0.1         |
| <i>English</i>      | <i>6th</i> | 3.1         | 3.6         | 3.1         | 1.8         | <b>0.7</b>         | 0.0         |
| <i>Science</i>      | <i>6th</i> | 3.3         | 4.2         | 3.0         | 1.8         | <b>1.6</b>         | 0.5         |

## 6.3 Jassim School

### Context of the School

#### 6.3.1 Overview

The ongoing visit record kept by the participant researcher indicated that Jassim School is a primary boys' school established in the late 1950s. On first visiting the school as a member

of the Cluster Team, this school was considered as one of the smallest schools in Bahrain, as indicated by *Table 6.26* below, which summarises the key school demographics.

Table 6.26: *Jassim School Key Demographics*

| School's Name   |         | Jassim School  |                   |                       |                       |   |   |
|---|---------|--|-------------------|-----------------------|-----------------------|---|---|
| School's type   |         | Government   |                   |                       |                       |   |   |
| Year of establishment   |         | Late 1950s   |                   |                       |                       |   |   |
| Age range of students   |         | 6 – 12 years   |                   |                       |                       |   |   |
| Grades (e.g. 1 to 12)   |         | 1 – 6 primary  |                   |                       |                       |   |   |
| Number of students  |         | 151 Boys   |                   |                       |                       |   |   |
| Students' social background   |         | Most students come from lower socio-economic and middle-income families  |                   |                       |                       |   |   |
| Classes per grade   | Grade   | 1  | 2                 | 3                     | 4                     | 5 | 6 |
|   | Classes | 1  | 1                 | 1                     | 1                     | 1 | 1 |
| Number of administrative staff  |         | 7 administrative and 3 technicians   |                   |                       |                       |   |   |
| Number of teaching staff  |         | 26   |                   |                       |                       |   |   |
| Principal's tenure  |         | 3 years  |                   |                       |                       |   |   |
| External assessment and examinations  |         | QQA's National Examinations  |                   |                       |                       |   |   |
| Number of students in the following categories according to the school's classification |         | Outstanding  | Gifted & Talented | Physical Disabilities | Learning Difficulties |   |   |
|   |         | 28   | 7                 | -                     | 27                    |   |   |
| Major recent changes in the school  |         | - Four new teachers for core subjects in the second cycle have joined the school in the past academic year 2011 – 2012 |                   |                       |                       |   |   |

Source: National Authority of Qualifications and Quality Assurance for Education and Training (2013b).

Most students in Jassim School came from two adjacent villages. The initial impressions were that facilities were very old and classrooms were small, however, the recreational space surrounding the school was huge. Despite this, due to the heat and lack of shaded areas, in the summer students faced difficulties playing outside in the break time. Specialist facilities available in the school included a computer laboratory, a learning resource centre (without a specialist), an art room, and a special needs education facility. Many teachers are non-Bahraini. When this research commenced in 2012, it was found that the school had been graded as 3, which is considered to be 'Satisfactory', in 2012 by QQA (National Authority of Qualifications and Quality Assurance for Education and Training, 2013b).

This grading was higher than the previous review conducted in 2008, which had resulted in an overall effectiveness judged as 4, which is considered to be 'Inadequate', (National Authority of Qualifications and Quality Assurance for Education and Training, 2008b). A comparison of the Review findings by area is shown in Table 6.27.

Table 6.27: *Jassim QQA Review Judgments*

| <i>Aspect</i>   | <i>Grade: Description</i> |                        |
|---|---------------------------|------------------------|
|   | <b>2008</b>               | <b>2013</b>            |
| <i>The school's overall effectiveness</i>                                     | <b>4: Inadequate</b>      | <b>3: Satisfactory</b> |
| <i>The school's capacity to improve</i>                                       | <b>4: Inadequate</b>      | <b>2: Good</b>         |
| <i>Students' academic achievement</i>   | 4: Inadequate             | 3: Satisfactory        |
| <i>Students' personal development</i>   | 4: Inadequate             | 2: Good                |
| <i>The quality of effectiveness of teaching and learning</i>                  | 4: Inadequate             | 3: Satisfactory        |
| <i>The quality of the curriculum implementation</i>                           | 4: Inadequate             | 2: Good                |
| <i>The quality of the support and guidance for students</i>                   | 4: Inadequate             | 2: Good                |
| <i>The quality and effectiveness of leadership, management and governance</i> | 3: Satisfactory           | 2: Good                |

As can be seen in *Table 6.27*, indicators covering students' academic achievement' and 'the quality of effectiveness of teaching and learning', which receive the highest weighting in consideration a school's overall effectiveness (National Authority of Qualifications and Quality Assurance for Education and Training, 2012b), had both shown grade improvements, and consequently the lift in the overall rating QQA gave this school.

### **6.3.2 Pre-Intervention Survey**

A baseline survey was distributed to twenty-six staff in September 2012 after gaining consent, and this yielded a response rate of 96.1 percent. However, not all questions were answered as the following section, which covers all elements in the pre-intervention survey, discusses further. The data gained from the survey is detailed in Appendix Chapter Six, where it is not included below.

#### **A. Committing to School Improvement**

The response rate for this section was 96 percent, apart from question two that recorded only 92 percent. Almost half of the respondents (47.6%) were committed to the notion of school improvement and two-thirds (60%) considered that the school had changed the culture of how people operate together (**Appendix 6.55**), as illustrated by the following comments:

"For a year now, the school has changed the school environment and dramatically marked by utilities, agriculture, landscaping and garden birds" (Pre/J/5).

Before the school improvement projects the educational process was traditional, we used it for many years and after the school improvement projects, teachers were trained in formulation of learning objectives in new ways and the application of teaching and learning strategies, and teaching and learning become student centred (Pre/J/14).

## **B. School Diagnosis and Coherence**

The response rate for this section was 96 percent. Just over two fifths (44%) of the respondents indicated that the school had well established practices for school diagnosis and coherence. More than half (56%) believed that the school had well-functioning support provided by the Cluster Teams.

In regards to the question about whether the school was assuming collective responsibility for individual students, almost two fifths (44%) of the respondents considered that the school was making good progress and an equal proportion thought that the school had well established this condition (**Appendix 6.56**), as illustrated by one teacher's comment:

All school staff know the school's vision because they participated in it, apply it in the educational practices in the classroom and outside, and are working to provide safe, effective, and inducing environment. Each individual in the school is responsible for the students' outcome (J/14).

## **C. High Expectation**

The response rate for this section was 96 percent. Slightly less than half (47%) of the respondents considered that the school had high expectation, and a slightly higher percentage (56%) believed that the school had well established practices for identifying and agreeing on improvement strategies for teaching and learning as illustrated by the

following feedback (**Appendix 6.57**): "The application of learning strategies in the classroom and focus on them" (Pre/J/22).

#### **D. Deep Learning**

The response rate for this section was 96 percent, apart from question two that recorded only 92 percent. Approximately two-fifths (42.4%) of respondents considered that the school had well established practices that resulted in deep learning. Half (52%) of the respondents considered that the school had generally well established the practice of having professional development positively impacting on teacher practice and students' learning (**Appendix 6.58**). On the other hand, respondents considered that professional development was not effective: "There are no ongoing supports, but individual workshops in specific professional development. Learning strategies are limited such as cooperative learning and problem solving" (Pre/J/22).

In addition, respondents believed that the professional learning communities were not functioning well: "There are no professional learning communities in the school and the ones which are in the Ministry do not meet the true concept of it. The department meetings were only for follow up" (Pre/J/10).

#### **E. Change Reactions**

The response rate for this section was 96 percent. Two fifths of the respondents (40%) believed that the school had well established processes for change reaction – a term also commonly referred to as "reflective practice". A greater percentage, accounting for nearly half (48%) of respondents, believed that the school had established good support for improvement initiatives in the school (**Appendix 6.59**):



"There are vigorous and positive attempts in educational practices through the application of recommendations and support of the improvement initiatives internally and externally" (Pre/J/14).

#### **F. Share Success**

The response rate for this section was 96 percent. The school had well established practices for sharing success, with more than a third (37.3%) of respondents identifying that the school made good progress and indeed, a similar percentage (37.3%), argued that the school had embedded this as an ongoing practice (**Appendix 6.60**).

"There are regular meetings between the leaders and teachers. We also analysed the students' exams results" (Pre/J/5).

"There are regular meetings with the improvement team to review the strategic plan" (Pre/J/12).

*To sum up:* Before the intervention, the school's data showed that the school environment had changed positively to stimulate learning, and this had been achieved largely through the school's own efforts, whereas the change in teaching and learning practices was the result of interventions initiated by the Ministry. In addition, there was a new school vision, and students were asked to repeat it regularly, but no evidence was subsequently seen in practices designed towards achieving it. Moreover, 56 percent of respondents considered that the school had come to some agreement on the teaching and learning strategies, but as all came from the MoE it was not tailored to the school's needs. Data showed that respondents were satisfied with the professional development programmes on offer, but not with the professional learning communities. Finally, it was clear that the school was on the

way towards establishing regular review of its work and staff had held a few regular meetings to monitor progress and allow them to give feedback to each other.

### **6.3.3 Intervention**

The analysed data from the baseline survey were shared with the SIT members on six different occasions that matched the six elements of the SCBSI model. The SIT acted accordingly and implemented actions to raise the performance in each area, and to fill any gaps, as outlined in **Appendix 6.61**, which shows the actions the school did to improve the school performance.

Four respondents, who held a range of positions in higher leadership, middle leadership and as teachers, participated in all interviews covering the intervention period of the study. The appendices (**Appendix 6.62**), detail further information about the respondents.

#### **A. Committing to School Improvement**

Interviewees were asked nine questions to gauge their perceptions about the process of committing to school improvement. Respondents believed that the efforts to improve school performance would develop current practices: "Yes, sure dramatically. Schools move to new concepts" (JASG).

Half (50%) of the respondents stated that the purpose of the process of improving school performance was to enhance teachers' performance, while the remainder identified the main purpose as being to enhance students' achievement: "Sure, raise the level of students, raise school level, raise the level of education in Bahrain" (JAKA).

All interviewees agreed that they were chosen to be in the SIT because of their effectiveness in the workplace: "Based on the most effective teachers. After understanding the project, it has become clearer of our roles" (JMAM).

They felt that working collaboratively increased over the duration of the study, though some indicated that they still mainly worked alone:

"It is important that we work together to achieve the goals of the school and improve the performance and this is existing in the school" (JGNA).

"It is a list of names who are ineffective, because the leader is the only one who works" (JHJM).

Most interviewees believed that the teachers would largely improve their practices and that school performance would continue in the improvement projects, though there were some issues of concern with sustainability in that "Teachers regard improvement initiatives as an additional burden", one (JMAJ) explained.

Another potential problem in sustaining school improvement was staff turnover: "We started to change the convictions, but because of teachers changing every year, we start again with the new comers" (JMAM).

As a consequence, not all teachers were aware of, or could explain the improvement project accurately: "Half of teachers know the improvement projects and can talk about them" (JMAM).

However, Interviewees believed that the Cluster Team could support the school to make the desired progress "to a large extent" (JGNA). This led to a general feeling of positivity about their work, although once again for some the added burden was problematic: "Considered it as additional work and I cannot cover my basic job" (JMAJ).

## **B. School Diagnosis and Coherence**

Interviewees were asked six questions pertaining to the issue of school diagnosis and coherence of approach toward school improvement. Interviewees participated in the development of the school strategic plan through departmental planning sessions as well as meetings with the school leadership: "Each department puts its objectives, then put the general and specific objectives" and then "Through the development of the plan that achieve the vision" (JAKA).

An interesting viewpoint expressed by all the interviewees was that teachers should not be responsible for raising students' results: Teachers should not be responsible for the result of students" (JAKA).

## **C. High Expectations**

Interviewees were asked five questions. In general, the approach taken by the school was to plan for improved educational strategies through linking their needs based on the National Exams results: "Building on the emerging conditions of National Examinations and academic achievement, plan for that, then we might be certain of achievement in this aspect" (JASG).

Interviewees supported each other in their work through exchange class visits. "There is investment through exchange visits and constant communication with everyone" (JAKA).

## **D. Deep Learning**

Interviewees were asked eight questions. The interviewees believed that they benefited from the professional development programmes, but that ongoing monitoring was required to monitor effectiveness and also to ensure new teachers are brought up to speed: "Sufficient

according to the needs of the school. There are conflicts through more than one teacher leaving the school. There is no follow-up to the impact of training" (JASG).

Indeed, it was suggested that "Not all programmes" (JAKA) were built on students' needs and compatible with the school goals and further, that the SIT meetings were only to some extent useful and purposeful "To some extent. ..." according to one respondent [JGNA].

All interviewees agreed that they shared and involved others with the new strategy they learned in the professional development programme. They also mentioned that the professional development programmes had an impact on teachers' performance: "That's what is required and I encourage it" (JGNA).

Nevertheless, the daily journals data show that the school did not have meetings or a clear agenda in the alignment between QQA's national standards, their school's needs and students' needs. Because of the situation of the school, the school principal had limited power to make changes. Some teachers were very resistant to change and on occasion were observed as reluctant to go to class, and antagonistic if anyone reminded them of their responsibilities to be on time.

### **E. Change Reaction**

Interviewees were asked seven questions. They were divided in their responses about whether the new ways that were being implemented in the school to improve the performance were being effective:

"Leadership style, which is now is shared leadership, given the responsibility to others" (JAKA).

"Traditional stereotype. There is no change" (JASG).

None of those interviewed had joined in a network to enhance his/her performance nor the school's performance. They talked about the school improvement projects with other schools only and "with schools that have school improvement projects and we only talked about the strategic plan", one respondent (JMAJ) explained.

## **F. Share Success**

Interviewees were asked four questions. They regularly checked their plans to ensure progress: "I review my work on a regular basis" (JAKA).

They produced and distributed bulletins that contained a variety of activities and information about the school projects: "Leaflets about behaviour and some project hand-outs" (JGNA).

Meetings to review the school's strategic plan had been held, and follow-up to consider the impact of it had been organized, but it was at a very cursory level: "It is not evaluation carried out, it is just to check what has been implemented and what is not" (JMAJ).

*To sum up:* Interviewees were chosen to be leaders for the improvement projects because of their effective work. The majority understood the purpose of the school improvement projects and believed that the Cluster Team support had a positive impact on the improvement process and that the effort to improve school performance would develop current practice.

From the researcher's perspective, as a member in the Cluster Team, this school appeared to be one of the most challenging to improve in Bahrain. Though it was small, almost all its staff were non-Bahraini, therefore, it was difficult for them to talk about school improvement to others; especially parents. It was not just a language issue: the majority of teachers came from a different culture and operated from a different educational paradigm.

As well there had recently been a change of leadership, with the previous principal leaving a gap in the school improvement initiative. An additional factor was that there had been one particular teacher who taken an informal leadership role the school improvement initiative, but once he left for a medical travel, the performance of teachers fell, to the extent that some were even observed as being reluctant to go to the classrooms to teach.

### **6.3.4 Post Intervention Survey**

The post survey was distributed to twenty-six staff in June 2013 yielding a response rate of 63 percent. That lower-than-average participation rate was not unexpected, as almost all teachers in this school were non Bahraini and some of them left the school as soon as teaching duties were completed to return to their homeland. All elements in the post-intervention survey are discussed in the following sections, and any data gained from the survey not included below are detailed in Appendix Chapter Six.

#### **A. Committing to School Improvement**

The response rate for this section was 63 percent. Approximately two fifths of respondents (43.5%) were committed to the notion of school improvement, but half (52.9%) believed that the school was making good progress in familiarising teachers with the improvement projects for the school, to the extent that, by the end of the study it was reported that: "Most teachers can be school improvement projects leaders". (Post/J/13) **Appendix 6.63.**

#### **B. School Diagnosis and Coherence**

The response rate for this section was 63 percent. More than half (57.4%) of the respondents indicated that the school had well established the practice of school diagnosis and coherence was evidenced in planning. The majority (82.4%) of respondents thought the

school had well established the practice of sharing and understanding the school vision. They reported that SIT members supported teachers and conducted meetings to communicate the implementation mechanisms (**Appendix 6.64**):

"Improvement team provides ongoing support to teachers by holding continuous meetings explaining the mechanisms of action and methods of implementation"  
(Post/J/13).

### **C. High Expectations**

The response rate for this section was 63 percent. Slightly less than half (45.6%) of the respondents considered that the school had high expectations, and a similar percentage (47.1%) believed that the school was making good progress in thinking together about how to align their standards, instruction, assessment, and programmes with their vision (**Appendix 6.65**).

### **D. Deep Learning**

The response rate for this section was 63 percent. Almost two-fifths (44.1%) of the respondents believed that the school had established activities that led students towards deep learning. Three quarters (76.5%) of respondents believed that the school's professional development programme had had a positive impact on teacher practice and student learning (**Appendix 6.66**).

"Professional development for pupils, and to improve their personal development were conducted. The impact is seen in students' behaviour and their achievement"  
(Post/J/13).



## **E. Change Reaction**

The response rate for this section was 63 percent. Approximately two-fifths (39.7%) of the respondents considered that the school had well established practices for change reaction, a term also commonly referred to as 'reflective practice. Almost half (47.1%) considered that the school had embedded the practice of support for the school improvement initiatives (**Appendix 6.67**).

## **F. Share Success**

The response rate for this section was 63 percent. The school had established sharing success strategies, according to two-fifths (43.1%) of respondents, with slightly more than half (52.9%) of respondents identifying that the school had systems in place for periodic review of the school improvement work (**Appendix 6.68**): "We have a weekly meeting with the school principal to evaluate the plan" (Post/J/7).

However, the students' results at a school and national level were somewhat contradictory, giving rise to a questioning of the effectiveness of the school improvement effort. The First Cycle (**Appendix 6.69**) students' results in the academic year 2012/2013, the year of intervention, progressed by 0.59 percent compared with the academic year 2011/2012. However, Second Cycle (**Appendix 6.70**) students' results in the academic year 2012/2013 deteriorated by 8.43 percent compared with the academic year 2012/2013. Given the fact that the government schools' sector lacked a rigorous moderation system at that time, these findings may or may not be significant. Indeed, the National Examinations performance scores (**Appendix 6.71**) and (**Appendix 6.72**) indicated that all subjects' scores had deteriorated in grade three and in grade six.

*To sum up:* After the intervention, half of the respondents believed that the school was making good progress in familiarizing teachers with the improvement projects for the school. On the other hand, from the daily visit journals, it was revealed that most teachers hardly knew the names of the improvement initiatives, let alone being actively engaged to further them.

The majority of respondents thought the school had a well understood, shared school vision. However, they did not give any examples of how this was translated into action. The majority of respondents believed that the school had a well-established professional development programme that made a positive impact on teacher practice. This did not appear, however, to have been translated into enhanced student learning, according to national and international test results.

### **6.3.5 Summary**

The case-study of Jassim School indicated a deterioration in the quality of education provision over the period of the implementation of the SCBSI model as described in this section. The change in leadership appeared to be a significant factor, leading to a derailment of school improvement initiatives that had previously been on track, as can be seen by the data comparing pre and post intervention responses, which follows.

The new school principal seemed powerless. He was frustrated with the size of the school, having previously been in a bigger school where there were more than a hundred teachers. That affected his way of implementing the improvement initiatives. One of the teachers, who was in the school for a long time as he revealed in interviews and observations, tried

to lead the school to a better position, but got minimal support from the school principal. Once that teacher left the school, the data showed that the school deteriorated markedly.

Leadership activities and decision-making seemed not to have been well-developed as part of the school improvement initiative, and there was little evidence that teachers were participating in leadership activities and in decision-making collectively. Data showed that there was no collaborative working environment, though the environment was positive. The school principal did not encourage teachers to learn from each other, nor to work in groups. Teachers' leadership activities were not seen in any task, and to the contrary, teachers sat together and chatted for a long time after classes were due to start, leaving their classes without teacher leadership. The school vision was developed collectively by all school members, but there were no collective activities, nor individual ones, to operationalise the vision. Jassim School benefited from the professional learning communities, but that gain did not appear to be translated into the classroom practices.

The six elements will now be analysed in turn, examining the difference between baseline and post-intervention data, utilising mean scores for each item.

#### A. Committing to School Improvement

Table 6.28: *The Progress in Items Average Results – Committing to School Improvement*

| <b><i>Committing to School Improvement</i></b>  | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|---|------------------------|--------------------|----------------------|
| 1. <i>believe the improvement effort will enhance current practice</i>  | 3.52                   | 3.29               | -0.23                |
| 2. <i>know what we want to achieve from the process of the improvement</i>  | 3.71                   | 3.35               | -0.36                |
| 3. <i>know the reason for undergoing the process of the improvement</i>   | 3.92                   | 3.29               | -0.63                |
| 4. <i>change the culture of how people operate together</i>   | 3.76                   | 3.24               | -0.52                |
| 5. <i>teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school</i> | 3.72                   | 3.00               | -0.72                |

|                |             |             |              |
|----------------|-------------|-------------|--------------|
| <i>Average</i> | <b>3.73</b> | <b>3.24</b> | <b>-0.49</b> |
|----------------|-------------|-------------|--------------|

The data in Table 6.28 show that there was a slight deterioration in the average results of the element, from the baseline survey to the post one.

Respondents believed that the improvement effort deteriorated as teachers became more familiar with the improvement projects for their classroom and for the school. There was an average deterioration of -0.72 from the baseline survey average result (3.72) to the post survey average result (3.00).

## B. School Diagnosis and Coherence

Table 6.29: *The Progress in Items Average Results – School Diagnosis and Coherence*

| <i>School Diagnosis and Coherence</i>  | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>Share and understand the school vision</i>   | 3.84            | 3.71        | -0.13         |
| 2. <i>Know the function of the support we get from the Cluster Teams</i>                   | 3.64            | 3.35        | -0.29         |
| 3. <i>All actively involved in school planning processes</i>                               | 3.48            | 3.29        | -0.19         |
| 4. <i>All assume collective responsibility for individual students and school outcomes</i> | 3.56            | 3.47        | -0.09         |
| <b><i>Average</i></b>  | <b>3.63</b>     | <b>3.46</b> | <b>-0.17</b>  |

The data in Table 6.29 show that there was a slight deterioration in the average result of the element, from the baseline survey to the post-intervention survey.

Respondents believed that they knew the function of the support that they got from the Cluster Teams. There was an average deterioration of -0.29 from the baseline survey average result (3.48) to the post survey average result (3.29).

### C. High Expectations

Table 6.30: *The Progress in Items Average Results – High Expectations*

| <b><i>High Expectations</i></b>  | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|--|------------------------|--------------------|----------------------|
| <i>1. think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 3.32                   | 3.24               | -0.08                |
| <i>2. keep our vision alive by reviewing it regularly</i>  | 3.28                   | 3.18               | -0.10                |
| <i>3. agreed on strategies for teaching and learning</i>   | 3.52                   | 3.29               | -0.23                |
| <i>4. reinforce each other's strengths in our core work</i>  | 3.36                   | 3.24               | -0.12                |
| <b><i>Average</i></b>  | <b>3.37</b>            | <b>3.24</b>        | <b>-0.13</b>         |

The data in Table 6.30 show that there was a slight deterioration in the average result of the element, from the baseline survey to the post-intervention one.

Respondents believed that the school had declined in the level of practice of the agreeing on strategies for teaching and learning. There was an average deterioration of -0.23 from the baseline survey average result (3.52) to the post survey average result (3.29).

### D. Deep Learning

Table 6.31: *The Progress in Items Average Results – Deep Learning*

| <b><i>Deep Learning</i></b>   | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|---|------------------------|--------------------|----------------------|
| <i>1. have professional learning communities</i>  | 3.12                   | 2.94               | -0.18                |
| <i>2. our professional development is based on student needs and aligned with school goals</i>              | 3.54                   | 3.24               | -0.31                |
| <i>3. our professional development focuses on ongoing support rather than one-shot workshops</i>            | 3.40                   | 3.24               | -0.16                |
| <i>4. our professional development is having a positive impact on teacher practice and student learning</i> | 3.64                   | 3.65               | 0.01                 |
| <b><i>Average</i></b>   | <b>3.42</b>            | <b>3.26</b>        | <b>-0.16</b>         |

The data in Table 6.31 show that there was a slight deterioration in the average result of the element, from the baseline survey to the post one.

Respondents believed that the school had based the professional development on the student needs and aligned with school goals. There was an average deterioration of -0.31 from the baseline survey average result (3.54) to the post survey average result (3.24).

### E. Change Reaction

Table 6.32: *The Progress in Items Average Results – Change Reaction*

| <i>Change Reaction</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>have developed new ways to work together</i>                               | 3.08            | 3.00        | -0.08         |
| 2. <i>share professional practices and refine through feedback mechanisms</i>    | 3.36            | 3.24        | -0.12         |
| 3. <i>support the improvement initiatives in our school and can stand for it</i> | 3.60            | 3.53        | -0.07         |
| 4. <i>can talk about it the improvement initiatives to other parties</i>         | 3.60            | 3.29        | -0.31         |
| <b><i>Average</i></b>  | <b>3.41</b>     | <b>3.26</b> | <b>-0.15</b>  |

The data in Table 6.32 show that there was a slight deterioration in the average result of the element, from the baseline survey to the post one.

Respondents believed that they could talk about the improvement initiatives to other parties. There was an average deterioration of -0.31 from the baseline survey average result (3.60) to the post survey average result (3.29).

## F. Share Success

Table 6.33: *The Progress in Items Average Results – Share Success*

| <i>Share Success</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>review our work periodically</i>                           | 3.36            | 3.29        | -0.07         |
| 2. <i>produce ongoing brochures and students show their work</i> | 3.16            | 3.06        | -0.10         |
| 3. <i>scheduled meeting to evaluate the strategic plan</i>       | 3.28            | 3.29        | 0.01          |
| <b><i>Average</i></b>  | <b>3.27</b>     | <b>3.22</b> | <b>-0.05</b>  |

The data in Table 6.33 show that there was a slight deterioration in the average result of the element of 'share success', from the baseline survey to the post one.

Respondents believed that they reviewed their work periodically and produced brochures to share their success stories. However, there was an average deterioration of -0.10 from the baseline survey average result (3.16) to the post survey average result (3.06)

## G. National Examinations

Table 6.34: *Students National Examinations Performance Scores*

| <i>Subject/Year</i>     | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <b><i>2013</i></b> | <i>2014</i> |
|-------------------------|-------------|-------------|-------------|-------------|--------------------|-------------|
| <i>Arabic 3rd Grade</i> | 2.6         | 3.6         | 2.6         | 2.5         | <b>1.2</b>         | 0.6         |
| <i>Math 3rd Grade</i>   | 2.7         | 5.2         | 2.7         | 1.8         | <b>0.8</b>         | 1.0         |

The data in Table 6.34 demonstrate how the National Examinations performance scores in Grade 3 declined. Despite an improvement in 2010, overall results deteriorated dramatically in all subjects between 2009 and 2014 and over the period when the SIP was in place.

Table 6.35: *Students National Examinations Performance Scores*

| <i>Subject/Year</i> |            | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <b><i>2013</i></b> | <i>2014</i> |
|---------------------|------------|-------------|-------------|-------------|-------------|--------------------|-------------|
| <i>Arabic</i>       | <i>6th</i> | 2.8         | 3.4         | 2.2         | 0.5         | <b>0.0</b>         | 0.0         |
| <i>Math</i>         | <i>6th</i> | 3.3         | 5.6         | 3.0         | 1.6         | <b>0.4</b>         | 0.0         |
| <i>English</i>      | <i>6th</i> | 3.1         | 4.0         | 2.6         | 1.0         | <b>0.0</b>         | 0.0         |
| <i>Science</i>      | <i>6th</i> | 3.6         | 4.0         | 2.8         | 1.2         | <b>1.0</b>         | 0.0         |

Similarly, the data in Table 6.35 show that overall the National Examinations performance scores in Grade 6 deteriorated dramatically in all subjects.

## 6.4 Kameela School

### Context of the School

#### 6.4.1 Overview

The ongoing visit record kept by the participant researcher indicated that Kameela School is a primary girls' school established in late 1980s. On first visiting the school as a member of the school Cluster Team, the initial impressions were that the school had students' behavioural issues. The facilities were sound and well maintained, with specialist facilities including: a computer laboratory, moderate learning resources centre, art room, special education needs class, science laboratory, and domestic sciences room. Information supplied to the MoE indicated that the school was a multi-cultural student girls school. The table below, (Table 6.36) summarises the key school demographics.



Table 6.36: *Kameela School Key Demographics*

| <i>School's Name</i>   |                              | <i>Kameela School</i>   |          |          |          |          |          |  |
|--|------------------------------|---|----------|----------|----------|----------|----------|--|
| <i>School's type</i>   |                              | Government  |          |          |          |          |          |  |
| <i>Year of establishment</i>   |                              | Late 1980s  |          |          |          |          |          |  |
| <i>Age range of students</i>   |                              | 6 – 12 years  |          |          |          |          |          |  |
| <i>Grades (e.g. 1 to 12)</i>   |                              | 1 – 6 primary   |          |          |          |          |          |  |
| <i>Number of students</i>  |                              | 573 Girls   |          |          |          |          |          |  |
| <i>Students' background</i>  | <i>social</i>                | Most students come from middle-level income and social families   |          |          |          |          |          |  |
| <i>Classes per grade</i>   | <b>Grade</b>                 | <b>1</b>  | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> |  |
|  | <b>Classes</b>               | 3   | 3        | 4        | 3        | 4        | 3        |  |
| <i>Number of administrative staff</i>  |                              | 31  |          |          |          |          |          |  |
| <i>Number of teaching staff</i>  |                              | 51  |          |          |          |          |          |  |
| <i>Principal's tenure</i>  |                              | 8 years   |          |          |          |          |          |  |
| <i>External assessment and examinations</i>  |                              | QQA's National Examinations   |          |          |          |          |          |  |
| <i>Number of students in the following categories according to the school's classification</i> | <b>Outstanding</b>           |   |          |          |          |          |          |  |
|  |                              | 26  | 14       | 4        | 31       |          |          |  |
| <i>Major recent changes in the school</i>  | <b>Gifted &amp; Talented</b> |   |          |          |          |          |          |  |
|  | <b>Physical Disabilities</b> |   |          |          |          |          |          |  |
|  | <b>Learning Difficulties</b> |   |          |          |          |          |          |  |
|  |                              | <p>- A learning difficulties specialist has been appointed for the current school year 2011 – 2012.</p> <p>- Five new teachers for certain subjects such as Arabic, mathematics and citizenship have been appointed for the current school year.</p> <p>- An Assistant principal was appointed in the school year 2010 – 2011.</p> <p>- Three new social workers have been appointed for the current school year.</p> |          |          |          |          |          |  |

Source: National Authority of Qualifications and Quality Assurance for Education and Training (2011b).

Kameela School student population was made up of students from many different areas and the class sizes were big. At the time of conducting this study the Principal was in her last year in the school, retiring at the end of the academic year 2012/2103. Almost all the staff were Bahraini. The school was graded as 2, which is considered to be 'Good', as a consequence of the review conducted in 2011 by the QQA (National Authority of Qualifications and Quality Assurance for Education and Training, 2011b). This grading was higher than the previous review conducted in 2008, which had resulted in an overall effectiveness judgement of 3, or 'Satisfactory' (National Authority of Qualifications and Quality Assurance for Education and Training, 2011b). A comparison of the Review findings by areas is shown in Table 6.37.

Table 6.37: *Kameela QQA Review Judgements*

| <i>Aspect</i>   | <i>Grade: Description</i> |                |
|---|---------------------------|----------------|
|   | <b>2008</b>               | <b>2011</b>    |
| <i>The school's overall effectiveness</i>                                     | <b>3: Satisfactory</b>    | <b>2: Good</b> |
| <i>The school's capacity to improve</i>                                       | <b>3: Satisfactory</b>    | <b>2: Good</b> |
| <i>Students' academic achievement</i>   | 3: Satisfactory           | 2: Good        |
| <i>Students' personal development</i>   | 3: Satisfactory           | 2: Good        |
| <i>The quality of effectiveness of teaching and learning</i>                  | 3: Satisfactory           | 2: Good        |
| <i>The quality of the curriculum implementation</i>                           | 3: Satisfactory           | 2: Good        |
| <i>The quality of the support and guidance for students</i>                   | 3: Satisfactory           | 2: Good        |
| <i>The quality and effectiveness of leadership, management and governance</i> | 3: Satisfactory           | 2: Good        |

As shown in this table, in all domains the QQA rated the school in 2011 as 'Good,' contributing to the school's overall effectiveness grade of 2.

## 6.4.2 Pre-Intervention Survey

After gaining consent, the baseline survey was distributed to fifty-one staff in September 2012, yielding a response rate of 94 percent. However, not all questions were answered as the following section, that covers all elements in the pre-intervention survey, discusses further. The data gained from the survey are detailed in Appendix Chapter Six, where it is not included below.

### A. Committing to School Improvement

The response rate for this section was 94.1 percent, apart from question three that recorded 90.1 percent. Approximately one third of the respondents (37.8%) were committed to the notion of school improvement and more than half (58.7%) considered that the school had embedded well the practices required as part of the school improvement project that aimed to enhance current practice (**Appendix 6.73**), a finding supported by comments added to the survey forms:

"Improvement projects were clarified and we prepare the needed committees and participate in them. Based on that, we have started to implement the projects even in the teaching strategies, such as differentiated learning, and sharing learning objectives" (Pre/H/2).

However, some respondents felt that the improvement projects overworked them, as illustrated: "Improvement projects overworked teachers with filling out documents, and collect others, the provided psychological pressure on us and had negative impact on us" (Pre/H/29).

## **B. School Diagnosis and Coherence**

The response rate for this section was 94.1 percent, apart from question one, which recorded 92.1 percent, and question four, which recorded 90.1 percent. Around one third of the respondents (36.0%) indicated that the school had well established practices for diagnosis and coherence. Slightly less than half (48.9%) of respondents believed that the school had a shared and common understanding of the school vision (**Appendix 6.74**), as illustrated by one teacher's comment: "The vision has been developed by all members of the school and then discussed and voted on by the Board of Directors. SIT and other departments participated in the planning positively" (Pre/H/10).

However, there was a diversity of responses regarding who should take responsibility for students' results, with some participants arguing that it should be students themselves, whereas others said parents and/or teachers:

Responsibility of students' results basically is the student responsibility and on the extent of their attention in the classroom, then her family also should share in this responsibility to follow up at home. In addition, the responsibility is also on teachers to provide support and guidance especially if the student is weak and needs support (Pre/H/6).

## **C. High Expectations**

The response rate for this section was 94.1 percent, apart from question four, which recorded 92.1 percent. Two-fifths (40.3%) of the respondents considered that the school had high expectations, and more than half (57.4%) of respondents felt that the school was making good progress in the practice of reinforcing each other's strengths in the core work (**Appendix 6.75**), as this quote illustrates: "Teachers work as a team that support each other

in several areas, including: preparation activities and calendars, and applying expertise in the preparation of lessons" (Pre/H/5).

#### **D. Deep Learning**

The response rate for this section was 94.1 percent. Almost half (46.9%) of the respondents considered that the school had well established teaching and learning practices that resulted in deep learning. Half (50%) of the respondents indicated that the school had provided professional development that was positively impacting on teacher practice and students' learning (**Appendix 6.76**), as this quote illustrates: "Professional development programmes have a positive impact in raising students' motivation to learning and stimulate their attention, such as the training programme on the smart board" (Pre/H/5).

#### **E. Change Reaction**

The response rate for this section was 94.1 percent apart from question one, which recorded 92.1 percent. Almost half of the respondents (49.7%) believed that the school had well established the practice of change reaction – a term also commonly referred to as 'reflective practice'. A greater percentage, accounting for nearly half (54.2%) of respondents, believed that the school was making good progress in the practice of talking about the improvement initiatives to other parties (**Appendix 6.77**), as illustrated by the following quote: "Participation among colleagues in the understanding and application of school improvement objectives and share our different points of views" (Pre/H/4).

#### **F. Share Success**

The response rate for this section was 94.1 percent, apart from question three, which recorded only 92.1 percent. The school had well established the practice of sharing success, according to two-fifths (42.0%) of respondents, with two-thirds (60.4%) of respondents

identifying that the school had well established processes for the periodic review of the school improvement work (**Appendix 6.78**), as indicated by this representative feedback:

"The school has periodic meetings to review the plans and improve projects to determine the items that have been implemented and which have not been implemented and that in the process of implementation" (Pre/H/6).

*To sum up:* Before the intervention, the school's data indicated that the school staff were aware of the purpose of school improvement, though no qualitative evidence was provided in support. However, some respondents believed that the school improvement projects overworked them. Half of the respondents believed that the school had a common understanding of the school vision, but there was no evidence given as to how they worked to achieve this. There was a diversity of responses regarding who should be taking responsibility for students' results, but in general, it appeared that this school saw it as a collective responsibility amongst students, parents and teachers. Teacher feedback also showed that the professional development programmes had a positive impact on teachers' practices and they shared their expertise as one way of enhancing each other's practices.

### **6.4.3 Intervention**

The data from the baseline survey was shared with the SIT members after it was analysed. Data were shared on six different occasions, which matched the six elements of the SCBSI model. The SIT members acted on the findings, designing and implementing actions to raise the performance in each area, and to fill the gaps if any. **Appendix 6.79** shows the actions the school put in place to improve school performance. Three respondents

participated in all interviews. They held higher leadership positions and middle leadership positions, as detailed in the appendices (*Appendix 6.80*).

### **A. Committing to School Improvement**

All interviewees agreed that they were chosen to be in the SIT because of their positions at work:

The nomination by the school leaders according to our positions. Projects were selected randomly by name. We do not know the content of the improvement projects. There are some teachers who are able to give more but because of teaching load, they refused to take extra work in improvement projects (HLAMI).

Interviewees were asked nine questions to gauge their perceptions about the process of committing to school improvement. They believed that the efforts in school improvement would improve teachers' practices and impact on students' outcomes, as the following quote shows: "Will improve teachers' practices and we hope to be reflected on pupils' performance" (JFAJ).

Two third (60%) of the respondents believed that the purpose of the process of improving school performance was to enhance teachers' performance, while two fifths (40%) believed the purpose was to enhance students' achievement, as illustrated by one participant who explained that it was to: "Improve teacher performance and improve student performance in achievement and personal development" (HFAH). This same person explained that the teachers had worked collaboratively before the improvement project was introduced ("The team was working together before") arguing that teachers could do more in school improvement initiatives if they were encouraged and their work was recognized: "Possible.

Because there must be regulation and distribution of fairness. Encourage teachers and stimulate them more. There are frustrations among teachers" (HFAH).

S/he added that not all teachers at this school had a good understanding of the improvement projects: "Not all. We explained the projects. Cluster Team needs to explain that for the teachers" (HFAH).

In general, however, there was a widely held belief that the Cluster Team can support the school to make the desired progress: "To some extent. Cluster Team support is not clear to the school, as if it is an assessment team. This is the image" (HFAH). On the whole, interviewees felt positive about their work, even though many claimed that they were overworked because their work was different than previous years.

## **B. School Diagnosis and Coherence**

Interviewees were asked six questions pertaining to the issue of school diagnosis and coherence of approach towards school improvement. They shared the responsibility of achieving their school vision by conducting meetings, and distributing surveys. Teachers worked together to develop the school vision.

The previous vision was long. We discussed it. Then the distribution of papers for everyone to develop appropriate vision, which got most votes, received approval.

There have been no standards for vision, but the one, which got the highest number of votes (HFAH).

Data showed that teachers might vote for the vision which sounded good, short, or even easy to remember. The reason for them to change the previous vision was not because they achieved it, but because it was long. In addition, all the interviewees participated in the school planning because of their positions. However, interviewees believed that not all



teachers considered themselves responsible for students' results: "Because of our position, we participate in school planning" (HFAH). The interviewees thought the school had a culture of blame and, as one participant explained, "the blame is dominant on the steering" (HLAMI), and this may have been a factor in implementing the school improvement initiative.

### **C. High Expectations**

Interviewees were asked five questions. They were clear about how they achieved the school vision, implementing different methods to do that, such as activities and a professional development programme: "Programmes, activities, and events that serve toward achieving the vision. Raise students' achievement and raise the professionalism to get excellence" (HFAH). Furthermore, interviewees worked together to support each other, "collaboratively working, exchanging experiences, investing in each other's strengths" (HLAMI).

### **D. Deep Learning**

Interviewees were asked eight questions. The interviewees believed that the professional learning communities were beneficial to the school, "to exchange experiences" (HFAH). However, contrary to the point made in the previous section, some respondents here queried the effectiveness of the professional development programmes, claiming they were not sufficient to address the school needs: "Not enough because teachers need a lot and needs examples and huge support inside classroom" (HFAH).

However, all interviewees agreed that they shared and involved others with the new strategy they learned in the professional development programme through group discussions: "Through group discussions we transfer learning to teachers" (HLAMI). In the

response to how the professional development sessions were built on students' needs and compatible with the school goals, no-one answered the question specifically, but in general it was felt that the professional development sessions were "based on teachers' needs and might impact on students' benefit" (HFAH). However, SIT meetings were seen as useful and generally purposeful, though one respondent suggested that not all actions suggested were implemented: "Productive and focused on all school issues from all sides. Sometimes they are suggestion without implementation" (HLAMI).

There were factors that may have been linked to this, for example, school visits' records show that the principal was sick and did not attend regularly, and consequently the vice principal was overworked, a problem made worse by the fact that for two days each week, the DP was outside the school for study in the university. These situations affected the implementation of the school improvement projects.

### **E. Change Reaction**

Interviewees were asked seven questions relating to change reaction, a term also commonly referred to as 'reflective practice'. Their responses showed that they believed that the work laid on senior teachers to share the new information and to find ways to do that: "Learning strategies and sharing them with teachers are on senior teachers' shoulder" (HFAH). None of those interviewed had joined in a network connection, but all support the school improvement initiatives within the school.

### **F. Share Success**

Interviewees were asked four questions. They indicated that they regularly checked their plans and reviewed their work: "There are milestones to review the work" (HFAH).

They did not produce or distribute any bulletins to talk about the school improvement initiatives or the school success stories: "Maybe they produce bulletins or brochures, but I have not seen anything like that" (HLAMI). They did conduct meetings to review the school strategic plan through the board members, or SIT meetings. "Yes" (HLAMI).

*To sum up:* During the intervention, the school's data showed that the respondents believed that the efforts in school improvement would improve the teachers' practices and might influence students' outcome. However, there were fundamental and basic requirements for achieving that, which the collected data did not evidence, including working collaboratively to achieve the school vision. They worked together to choose the school vision, but there was no evidence to show that they put the vision into practice. In addition, the absence of senior managers affected the school negatively in that senior teachers and teachers thought they were overworked, and saw little value being placed on their work. On the other hand, the teachers and senior staff valued the support of the Cluster Team, but because of its role, and because of the school situation, some suggestions from the Cluster Team were not implemented in the school. Finally, although the professional development programmes provided by the MoE, were not sufficient enough to address the school needs, higher and middle leadership did not provide solutions to fill that gap.

#### **6.4.4 Post Intervention Survey**

The post survey was distributed to fifty-one staff in June 2013 yielding a response rate of 72.5 percent. However, not all questions were answered as the following sections, which cover all elements in the post-intervention survey and discusses these further. The data gained from the survey is detailed in Appendix Chapter Six, where it is not included below.

### **A. Committing to School Improvement**

The response rate for this section was 72.5 percent. One third of the respondents (34.8%) were committed to the notion of school improvement, but a higher percentage (55.6%) believed that the school had well established a culture of how people can work well together (**Appendix 6.81**), as illustrated by this quote: "Daily plans were changed, differentiation, and preparation of electronic lessons suitable for individual differences" (Post/H/16).

### **B. School Diagnosis and Coherence**

The response rate for this section was 72.5 percent. Approximately two-fifths (46.6%) of the respondents indicated that the school had well established the practice of school diagnosis and coherence. Half (54.1%) of respondents considered that the school was taking collective responsibility for individual students and school outcomes (**Appendix 6.82**). This is illustrated by the following quote: "Starting from our vision 'hand to hand toward excellence', all participated actively in the planning process by all school staff" (Post/H/19).

### **C. High Expectations**

The response rate for this section was 72.5 percent. Almost half (47.3%) of the respondents considered that the school had high expectations, and a higher percentage (62.2%) believed that the school had well established strategies for improving teaching and learning (**Appendix 6.83**). This is illustrated by this comment: "It was agreed on educational strategies based on its importance to the student and what the leadership and teachers see suitable to students, such as critical thinking, creative analysis, and learning by playing" (Post/H/4).

#### **D. Deep Learning**

The response rate for this section was 72.5 percent, apart from question one which recorded only 68.6 percent. Slightly more than half (51.4%) of the respondents believed that the school had well established practices to encourage learner engagement and deep learning. Two thirds (64.9%) of respondents believed that the school had well established the practice of building the professional development programmes tailored to meet student needs and align with school goals (**Appendix 6.84**): "Professional development programmes have been built according to the needs of students, and have a positive impact on the learning of the educational process" (Post/H/19).

#### **E. Change Reaction**

The response rate for this section was 70.5 percent, apart from question one which recorded 72.5 percent. Slightly higher than two-fifths (45.5%) of the respondents considered that the school had well established the practice of change reaction, and a slightly higher percentage (55.6%) considered that the school had well embedded and supported the improvement initiatives in the school (**Appendix 6.85**).

#### **F. Share Success**

The response rate for this section was 72.5 percent. The school had well established the practice of sharing success, according to more than half (55.9%) of the respondents, with a similar proportion (59.5%) considering that the school had embedded the practice of periodic review of the school improvement work **Appendix 6.86**. Despite these positive steps, students' results declined as shown in the average results in the final school internal examinations: First Cycle (**Appendix 6.87**) students' results in the academic year 2012/2013, the year of intervention, deteriorated by -0.83 percent compared with the

academic year 2011/2012; Second Cycle (*Appendix 6.88*) students' results in the academic year 2012/2013 deteriorated by -3.47 percent compared with the academic year 2012/2013 (although school it is noted that internal exams were not moderated). These findings were consistent with the National Examinations performance scores, which also showed a fall across all subjects in grade three (*Appendix 6.89*) and grade six (*Appendix 6.90*).

*To sum up:* after the intervention, the school's data showed that respondents believed that the school had well established the practice of how people worked together. Two third of the respondents believed that the school had well established the practice of building the professional development based on student needs and aligned with the school goals. However, despite these improvements in school practice, the student results in the internal and external exams had declined.

### **6.4.5 Summary**

The case-study of Kameela School indicated that the school had progressed in the implementation of the SCBSI model. This was despite the fact that the principal was frequently absent and therefore there was not the opportunity for collaborative work at the senior management level to facilitate improvement in the school's performance. Middle leaders were the key people to run the school, reviewing the school work, and providing feedback to each other to provide support and guidance for improvement. Teacher leadership was partly manifested through teachers' participation in decision-making, represented by their participation in the SIT meetings and other committee meetings where decisions were taken. Teachers' leadership activities were seen in their encouragement of others toward change and improved educational practice. The school vision was developed collectively by all school members, but there was no evidence of tangible actions taken

toward achieving it. Collaborative teams seemed to be present at department level, forming what were in effect professional learning communities, which together with the professional development activities provided, gave considerable benefit to Kameela school's improvement initiative.

The six elements will now be analysed in turn, examining the difference between baseline and post-intervention data, utilising mean scores for each item.

### A. Committing to School Improvement

Table 6.38: *The Progress in Items Average Results – Committing to School Improvement*

| <i><b>Committing to School Improvement</b></i>  | <i><b>Baseline</b></i> | <i><b>Post</b></i> | <i><b>Change</b></i> |
|---|------------------------|--------------------|----------------------|
| 1. <i>believe the improvement effort will enhance current practice</i>  | 2.81                   | 3.00               | 0.19                 |
| 2. <i>know what we want to achieve from the process of the improvement</i>  | 3.02                   | 3.46               | 0.44                 |
| 3. <i>know the reason for undergoing the process of the improvement</i>   | 3.61                   | 3.62               | 0.01                 |
| 4. <i>change the culture of how people operate together</i>   | 2.92                   | 3.89               | 0.97                 |
| 5. <i>teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school</i> | 2.81                   | 3.59               | 0.78                 |
| <i><b>Average</b></i>   | <b>3.03</b>            | <b>3.51</b>        | <b>0.48</b>          |

The data in Table 6.38 show that there was a slight progress in the average results of the element, from the baseline survey to the post survey.

Respondents believed that the school had changed the culture of how people operate together. There was an average progression of 0.97 from the baseline survey average result (2.92) to the post survey average result (3.89).

## B. School Diagnosis and Coherence

Table 6.39: *The Progress in Items Average Results – School Diagnosis and Coherence*

| <i>School Diagnosis and Coherence</i>  | <i>Baseline.</i> | <i>Post</i> | <i>Change</i> |
|--|------------------|-------------|---------------|
| 1. <i>Share and understand the school vision</i>   | 3.62             | 4.16        | 0.55          |
| 2. <i>Know the function of the support we get from the Cluster Teams</i>                   | 2.56             | 3.51        | 0.95          |
| 3. <i>All actively involved in school planning processes</i>                               | 3.29             | 3.76        | 0.47          |
| 4. <i>All assume collective responsibility for individual students and school outcomes</i> | 3.35             | 3.59        | 0.25          |
| <b><i>Average</i></b>  | <b>3.20</b>      | <b>3.76</b> | <b>0.56</b>   |

The data in Table 6.39 show that there was a slight progression in the average result of the element, from the baseline survey to the post survey.

Respondents considered that they knew the function of the support that they got from the Cluster Team. There was an average progression of 0.95 from the baseline survey average result (2.56) to the post survey average result (3.51).

## C. High Expectations

Table 6.40: *The Progress in Items Average Results – High Expectations*

| <i>High Expectations</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 3.08            | 3.59        | 0.51          |
| 2. <i>keep our vision alive by reviewing it regularly</i>  | 2.85            | 3.54        | 0.69          |
| 3. <i>agreed on strategies for teaching and learning</i>   | 3.60            | 4.08        | 0.48          |
| 4. <i>reinforce each other's strengths in our core work</i>  | 3.00            | 4.11        | 1.11          |
| <b><i>Average</i></b>  | <b>3.14</b>     | <b>3.83</b> | <b>0.69</b>   |



The data in Table 6.40 show that there was a slight progression in the average result of the element, from the baseline survey to the post survey.

Respondents believed that they kept their vision alive by reviewing it regularly. There was an average progression of 0.69 from the baseline survey average result (2.85) to the post survey average result (3.54).

#### **D. Deep Learning**

Table 6.41: *The Progress in Items Average Results – Deep Learning*

| <i><b>Deep Learning</b></i>   | <i><b>Baseline</b></i> | <i><b>Post</b></i> | <i><b>Change</b></i> |
|---|------------------------|--------------------|----------------------|
| <i>1. have professional learning communities</i>  | 3.15                   | 3.63               | 0.48                 |
| <i>2. our professional development is based on student needs and aligned with school goals</i>              | 2.92                   | 3.78               | 0.87                 |
| <i>3. our professional development focuses on ongoing support rather than one-shot workshops</i>            | 2.94                   | 3.38               | 0.44                 |
| <i>4. our professional development is having a positive impact on teacher practice and student learning</i> | 3.23                   | 4.08               | 0.85                 |
| <i><b>Average</b></i>   | <b>3.06</b>            | <b>3.72</b>        | <b>0.66</b>          |

The data in Table 6.41 show that there was slight progress made in the average result of the element, from the baseline survey to the post survey.

Respondents believed that the professional development had a positive impact on teacher practice and student learning. There was an average progression of 0.85 from the baseline survey average result (3.23) to the post survey average result (4.08).

## E. Change Reaction

Table 6.42: *The Progress in Items Average Results – Change Reaction*

| <i>Change Reaction</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| <i>1. have developed new ways to work together</i>                               | 2.91            | 3.49        | 0.57          |
| <i>2. share professional practices and refine through feedback mechanisms</i>    | 3.04            | 3.56        | 0.51          |
| <i>3. support the improvement initiatives in our school and can stand for it</i> | 3.40            | 4.14        | 0.74          |
| <i>4. can talk about the improvement initiatives to other parties</i>            | 3.15            | 3.92        | 0.77          |
| <b><i>Average</i></b>  | <b>3.13</b>     | <b>3.77</b> | <b>0.65</b>   |

The data in Table 6.42 show that there was a slight progression in the average result of the element, from the baseline to the post survey. Respondents felt that they could talk about the improvement initiatives to other parties. There was an average progression of 0.77 from the baseline survey average result (3.15) to the post survey average result (3.92).

## F. Share Success

Table 6.43: *The Progress in Items Average Results – Share Success*

| <i>Share Success</i>   | <i>Baseline.</i> | <i>Post</i> | <i>Change</i> |
|--|------------------|-------------|---------------|
| <i>1. review our work periodically</i>                           | 3.56             | 3.95        | 0.38          |
| <i>2. produce ongoing brochures and students show their work</i> | 2.81             | 3.76        | 0.94          |
| <i>3. scheduled meeting to evaluate the strategic plan</i>       | 3.30             | 3.70        | 0.40          |
| <b><i>Average</i></b>  | <b>3.22</b>      | <b>3.80</b> | <b>0.58</b>   |

The data in Table 6.43 show that there was a slight progression in the average result of the element, from the baseline survey to the post survey. Respondents indicated that the school produced ongoing brochures and students showed their work. There was an average

progression of 0.94 from the baseline survey average result (2.81) to the post survey average result (3.76).

## G. National Examinations

Table 6.44: *Students' National Examinations Performance Score – 3<sup>rd</sup> Grade*

| <i>Subject/Year</i> |            | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <b><i>2013</i></b> | <i>2014</i> |
|---------------------|------------|-------------|-------------|-------------|-------------|--------------------|-------------|
| <i>Arabic</i>       | <i>3rd</i> | 3.0         | 4.1         | 3.4         | 2.5         | <b>2.0</b>         | 2.2         |
| <i>Math</i>         | <i>3rd</i> | 3.0         | 4.0         | 3.0         | 1.6         | <b>1.5</b>         | 1.5         |

These data in Table 6.44 show that the National Examinations performance scores in Grade 3 had deteriorated dramatically in all subjects.

Table 6.45: *Students' National Examinations Performance Score – 6<sup>th</sup> Grade*

| <i>Subject/Year</i> |            | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <b><i>2013</i></b> | <i>2014</i> |
|---------------------|------------|-------------|-------------|-------------|-------------|--------------------|-------------|
| <i>Arabic</i>       | <i>6th</i> | 4.0         | 4.3         | 3.2         | 2.2         | <b>1.7</b>         | 1.1         |
| <i>Math</i>         | <i>6th</i> | 3.4         | 4.4         | 2.4         | 1.8         | <b>0.7</b>         | 0.0         |
| <i>English</i>      | <i>6th</i> | 4.3         | 4.7         | 3.5         | 2.8         | <b>2.4</b>         | 0.2         |
| <i>Science</i>      | <i>6th</i> | 3.7         | 4.4         | 3.1         | 2.2         | <b>1.5</b>         | 0.4         |

The data in Table 6.45 show that the National Examinations performance scores in Grade 6 had deteriorated dramatically in all subjects.

## **6.5. Comparison Across the Four Schools Within the Case-Study**

### **6.5.1 Overview**

Patterns and trends across the four schools that formed the case-study were analysed to identify the key themes arising from the application of the SCBSI model. Through this across school comparison, further insights into issues concerning school capacity building for improvement were gained.

### **6.5.2 Pre-Intervention Survey**

The baseline survey was distributed to one hundred and fifty-one staff in September 2012 after gaining consent, yielding a response rate of 95.4 percent. However, not all questions were answered, as the following section, that covers all elements in the pre-intervention survey, discusses further. The data gained from the survey is detailed in Appendix Chapter Six, where it is not included below.

#### **A. Committing to School Improvement**

The response rate for this section was 95.4 percent, apart from question two that recorded 94.7 percent and question three that recorded 93.4 percent. Almost two-fifths of the respondents (38.4%) were committed to the notion of school improvement and a higher percentage (51.8%), considered that they knew the reason for undergoing the process of the improvement (**Appendix 6.91**). The majority of respondents (90%) provided comments on administration, management, teachers' performance as evidence to support the reason for engaging in the process of school improvement.

## **B. School Diagnosis and Coherence**

The response rate for this section was 95.4 percent, apart from question one that recorded 94.7 percent and question four that recorded 94 percent. Once again two-fifths (42.8%) of the respondents indicated that the schools had generally well established practices for school diagnosis and coherence. Almost half (49%) of the respondents believed that they had a shared understanding of their school's vision, and a similar proportion (48.6%) considered that their school was taking collective responsibility for individual students and school outcomes (**Appendix 6.92**).

From the written feedback provided as a part of the pre-intervention survey, an overall trend was apparent across all four schools, with around one quarter (27%) of teachers participating in school planning either directly as individuals responsible for plans, or through contributing to the departmental planning process. This same qualitative data indicated that there was some diversity of opinion across schools as to whether the school, parents, or students were responsible for the achievement of the students' performance.

## **C. High Expectations**

The response rate for this section was 94.7 percent, apart from question three that recorded 95.4 percent. More than one-third (37%) of the respondents considered that their schools had high expectations, and almost half (46.5%) indicated that their school had agreed strategies for teaching and learning (**Appendix 6.93**). Indeed, the idea of applying effective teaching and learning strategies as a way to support students' learning was favoured by many and more than three-quarters (77.8%) of the respondents considered that their school had agreed strategies for teaching and learning.

#### **D. Deep Learning**

The response rate for this section was 95.4 percent, apart from question two that recorded 94.7 percent. Approximately two-fifths (39.5%) of respondents considered that the school was making good progress in deep learning. Just under half (46.2%) of the respondents indicated that schools had generally established the practice of having professional development positively impacting on teacher practice and students' learning (**Appendix 6.94**). All respondents agreed that they took professional development training, applied new teaching and learning strategies, and participated in professional learning communities to enhance their practices.

#### **E. Change Reaction**

The response rate for this section was 94.7 percent, apart from question one that recorded 94 percent. Almost two fifths of the respondents (39.4%) believed that the schools were making good progress in the practice of change reaction - a term also commonly referred to as 'reflective practice.' A slightly higher percentage, accounting for two-fifths (44.1%) of the respondents believed that the school had established good support for the improvement initiatives in the school and can defend it (**Appendix 6.95**).

#### **F. Share Success**

The response rate for this section was 94.7 percent, apart from question two that recorded 94 percent and question three that recorded 92.7 percent. The school had well established the practice of sharing success, according to more than a third (38.3%) of respondents, with nearly half (49.7%) agreeing that the school reviewed its work regularly (**Appendix 6.96**). Half of the respondents (50%) considered that their school conducted regular meetings with the SIT to review and plan the schoolwork.

*To sum up:* Before the intervention, the schools' data showed that the school improvement was generally focused on professional development and applying new teaching strategies rather than enhancing students' achievement. There was some diversity of opinion within and across schools as to who was responsible for the achievement of the students' performance, with the school, parents, teachers and students themselves variously quoted. In conclusion, it would seem that a collaborative strategy working with all stakeholders is required.

### **6.5.3 Intervention**

The data from the baseline survey was shared with the SIT members after it was analysed. Data were shared on six different occasions that matched the six elements of the SCBSI model. The SIT members acted accordingly and implemented actions to raise the percentage in each area, and to fill the gaps if any.

Overall twenty-eight people, ranging from principals to teachers, participated in the interviews. The participant profile shown in (**Appendix 6.97**) shows that the respondents' demographics matched the schools' demographics in terms of gender (54% male), years of experience in the MoE (average 15 years), and working years in the school (average 5 years). Participants were almost equally divided by gender (including 15 males and 13 females). They ranged in experience, with their span of total years working in their schools ranging from one to thirty-two years.

#### **A. Committing to School Improvement**

Interviewees were asked nine questions to gauge their perceptions about the process of committing to school improvement. Slightly over half of the participants (53.5%) believed

that the purpose of the improvement process was to develop teachers' performance, and they almost all believed that the efforts to improve school performance would develop current practices.

### **B. School Diagnosis and Coherence**

Interviewees were asked six questions pertaining to the issue of school diagnosis and coherence of approach towards school improvement. The majority of the participants (88%) had shared in building the vision and were inspired by it. They said that they had got the necessary support from the school leaders. However, slightly more than half (56%) of participants considered that teachers were familiar with the school goals and they tried to achieve them.

### **C. High Expectations**

Interviewees were asked five questions relating to expectations. They agreed that they contributed to achieving the school vision, but in general they did not know exactly how this could be achieved.

### **D. Deep Learning**

Interviewees were asked eight questions relating to deep learning. The interviewees believed that the professional development sessions impacted positively on their performance and students' achievement. They also considered that the SIT meetings were useful. On the other hand, almost one third of participants (32%) believed that the professional development programmes offered were not enough to address their needs.



### **E. Change Reaction**

Interviewees were asked seven questions relating to change reaction. One third of participants did not join any internal or external educational networks. However, almost all participants talked about the SIP inside the school, but not with parents or people outside the MoE.

### **F. Share Success**

Interviewees were asked four questions relating to sharing success. In general there was agreement that they reviewed their work consistently and that the school published brochures and productions such as leaflets about the school activities.

*To sum up:* During the intervention, the schools' data generally showed that respondents believed that the Cluster Team support had a positive impact on the improvement process. The respondents reported that they also had participated in building the school vision but they did not know how they were expected to be achieving it.

## **6.5.4 Post Intervention Survey**

The post survey was distributed to one hundred and fifty-one staff in June 2013 yielding a response rate of 79.5 percent. However, not all questions were answered as the following sections, that cover all elements in the post-intervention survey, discuss further. The data gained from the survey is detailed in Appendix Chapter Six, where it is not included below.

### **A. Committing to School Improvement**

The response rate for this section was 77.5 percent, apart from questions two and three that recorded 78.1 percent. More than two fifths of the respondents (43.3%) were committed to the notion of school improvement. Slightly more than half of the respondents (52.1%), believed that their schools had embedded well the practices required as part of the school improvement project that aimed to enhance current practice (**Appendix 6.98**).

### **B. School Diagnosis and Coherence**

The response rate for this section was 79.5 percent. Once again slightly more than half (54.2%) of the respondents indicated that their school had well established the practice of school diagnosis and coherence. Two-thirds (65.8%) of respondents considered that their school was taking collective responsibility for individual students and school outcomes. A slightly lower percentage (58.3%) believed that they understood the school vision (**Appendix 6.99**).

### **C. High Expectations**

The response rate for this section was 79.5 percent. Slightly more than half (53.3%) of the respondents considered that their school had high expectations, and almost two thirds (63.3%) believed that the school had well established the practice of agreeing on strategies for teaching and learning (**Appendix 6.100**).

### **D. Deep Learning**

The response rate for this section was 79.5 percent, apart from question one that recorded 78.1 percent. Nearly half (49.6%) of the respondents believed that their school had well established the practices of deep learning at their schools. A slightly higher percentage

(56.7%) of respondents considered that professional development was having a positive impact on teacher practice and student learning (**Appendix 6.101**).

### **E. Change Reaction**

The response rate for this section was 78.8 percent, apart from question one that recorded 79.5 percent. Slightly less than half (47.6%) of the respondents considered that their schools had well established the practice of change reaction, and slightly more than half (55.5%) of respondents felt that their school had well established the practice of talking about the improvement initiatives to other parties (**Appendix 6.102**).

### **F. Share Success**

The response rate for this section was 79.5 percent. The schools had generally well established the practice of sharing success according to two-thirds (65.8%) of respondents, with slightly more than half (58.3%) of the respondents agreeing that their school had well established the practice of reviewing their work regularly (**Appendix 6.103**).

## **6.5.5 Summary**

The case-study indicated that in general the schools felt that they had progressed in the implementation of the SCBSI model as was outlined in Chapter Four. Many teachers seemed to have been able to contribute to strategic planning and the development of teaching and learning strategies that assisted in building a school's capacity for improvement. Also, many had been given the opportunity to assume leadership roles that allowed them to actively participate in decision-making on a range of issues (including professional development strategies, and the development of the school's vision), and to share some of the responsibility for students' outcomes. In saying this, it was evident that

not all teachers were engaged, and that the uptake of capacity building initiatives towards improvement varied between schools.

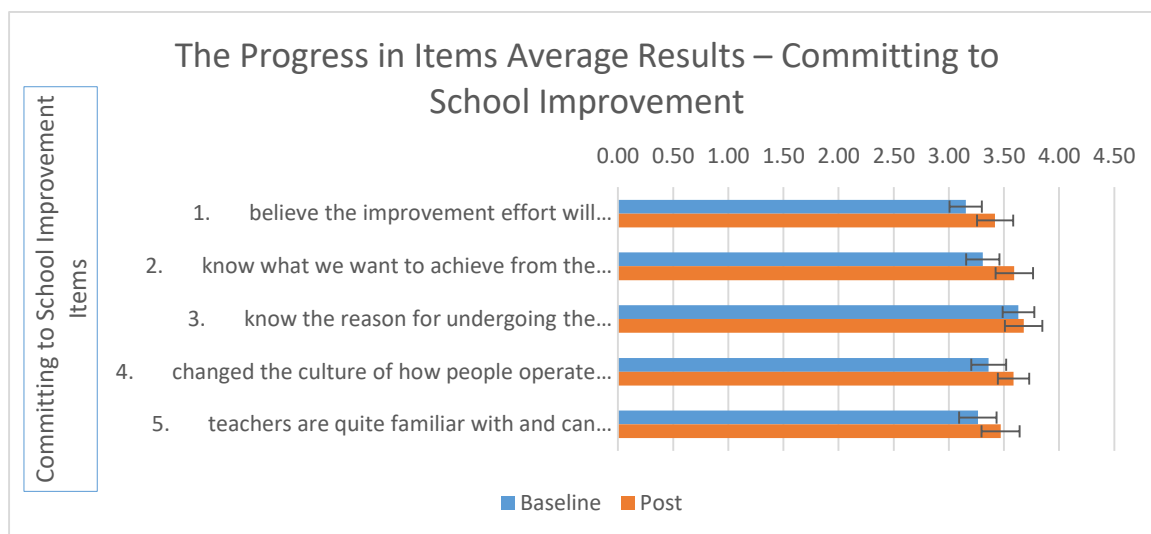
The role of teachers in students' learning and achievement appeared not to be central in the schools, although generally intensive work was being done on teachers' professional development. Whilst there was a continual drive for improvement, it appeared to be fragmented with no clear set of mechanisms to achieve the school vision. On the other hand, with the external support from the Cluster Team, which was highly appreciated, the schools appeared to have also developed internal capacity for improvement. One theme that emerged from the analysis of the schools is that sustained improvement is partly ensured by a collaborative working, and external support as illustrated in Mohammed School, Bader School, Sections 6.1.2, 6.1.3, 6.1.5, 6.2.2 and 6.2.3.

#### A. Committing to School Improvement

Table 6.46: *The Progress in Items Average Results – Committing to School Improvement*

| <b><i>Committing to School Improvement</i></b>  | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|---|------------------------|--------------------|----------------------|
| 1. <i>believe the improvement effort will enhance current practice</i>  | 3.15                   | 3.42               | 0.27                 |
| 2. <i>know what we want to achieve from the process of the improvement</i>  | 3.31                   | 3.59               | 0.29                 |
| 3. <i>know the reason for undergoing the process of the improvement</i>   | 3.63                   | 3.68               | 0.05                 |
| 4. <i>change the culture of how people operate together</i>   | 3.36                   | 3.59               | 0.23                 |
| 5. <i>teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school</i> | 3.26                   | 3.47               | 0.21                 |
| <b><i>Average</i></b>   | <b>3.34</b>            | <b>3.55</b>        | <b>0.21</b>          |

Figure 6.17: The Progress in Items Average – Committing to School Improvement



The data in Table 6.46 show that there was a slight progression in the average results of the element, from the baseline survey to the post one.

Respondents believed that they knew what they wanted to achieve from the process of the improvement. There was an average progression of 0.21 from the baseline survey average result (3.31) to the post survey average result (3.59).

Teachers' comments from the baseline survey showed that eight percent of respondents believed that the improvement effort would enhance current practice, while almost one-quarter (23.8%) believed the same in the post survey. This progress was supported by the majority (89.2%) of interviewees comments.

In filling the survey, participants were asked to provide supporting examples. The examples the participants provided related to their teaching practices rather than students' outcomes. The word 'student' was mentioned by only 24.5 percent of respondents, while the word 'teacher' was mentioned by 75.5 percent and the word 'school' was mentioned by 22 percent.

It seems that teachers were more concerned with the changes that happened to their practice rather than the impact of their practices on students' learning and achievement.

Moreover, when the SIT members were asked about the mechanism for selection to become SIT members and whether the SIT was effective, 39 percent said they were chosen because of their position as senior teachers, 21 percent said the principal chose them, while only 28.5 percent said they were chosen because of their effective work in the schools. Moreover, 10.7 percent said they were asked to lead the improvement projects without knowing what each project involved and what they were aiming at, and 14 percent said that they were asked to lead the projects because they had light workloads.

This leads to consideration of how the SIT members worked together to carry out the improvement projects, whether they benefited from each other and whether working collaboratively was new in the school ethos. Almost 18 percent of STI members said that working collaboratively was new and they did not do it in the past while 14 percent said that they worked collaboratively because they needed this approach to improve the school's performance.

It seems that the SIT members were implementing the SIP as targets not tools to improve the performance of the students. This emerging conclusion was supported by two interviewees who remarked rather sarcastically that they worked more collaboratively in filing papers. That this conclusion has basis is also supported by another participant who claimed that teamwork was not effective in their school because the leader did the whole job while teachers were preoccupied with responsibilities associated with their teaching load.

Half (50%) of the participants said that teachers could not explain the improvement projects, while 21 percent said that teachers could explain the improvement projects if they

were asked to do so. One respondent believed that the reason for this was that teachers did not take the improvement project seriously because the projects came from outside the school and so they felt that it had nothing to do with them. In other words, there was no sense of ownership of the SIP for these respondents.

Half (53.5%) of the participants believed that they got the needed support from the Cluster Team. In contrast, 7 percent said that the support was not clear, claiming that the Cluster Team came to evaluate rather than support. In addition, half of the participants (53.5%) said that they were confident and relaxed when they were working in the improvement projects while in contrast, (21%) said that they were overworked.

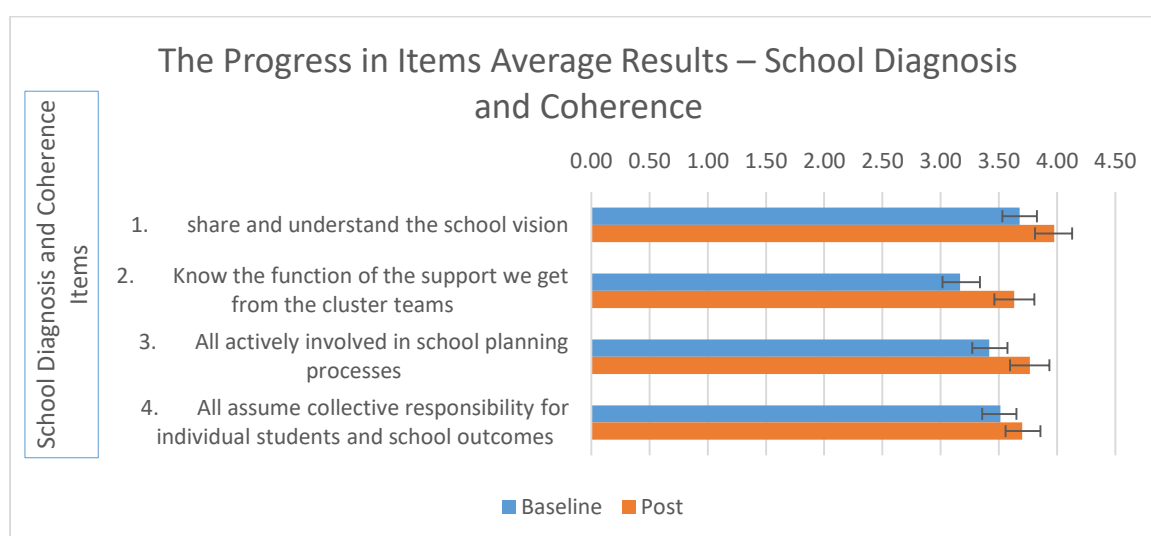
With regard to the change of the work that had been done during the previous year compared to the year of the study: two-fifths (42.8%) of participants said that there was a huge positive difference, seven percent said the work was only slightly different, twenty-one percent said there was no change at all, but ten percent said that there was a negative difference.

## B. School Diagnosis and Coherence

Table 6.47: *The Progress in Items Average Results – School Diagnosis and Coherence*

| <i>School Diagnosis and Coherence</i>  | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>Share and understand the school vision</i>   | 3.7             | 4.0         | 0.3           |
| 2. <i>Know the function of the support we get from the Cluster Teams</i>                   | 3.2             | 3.6         | 0.4           |
| 3. <i>All actively involved in school planning processes</i>                               | 3.4             | 3.8         | 0.4           |
| 4. <i>All assume collective responsibility for individual students and school outcomes</i> | 3.5             | 3.7         | 0.2           |
| <b><i>Average</i></b>  | <b>3.4</b>      | <b>3.8</b>  | <b>0.4</b>    |

*Figure 6.18: The Progress in Items Average Results – School Diagnosis and Coherence*



The data in Table 6.47 show that there was a slight progress in the average result of the element, from the baseline survey to the post one. Respondents considered that they knew the function of the support that got from the Cluster Team. There was an average progression of 0.4 from the baseline survey average result (3.2) to the post survey average result (3.6). In the baseline survey, one-third (36.4) of participants said that they had participated in writing the school vision, while slightly more than half (57.9) of the participants said the same in the post survey. Moreover, in the baseline survey, almost one-quarter (22.7%) of the participants participated in the school planning, while two thirds (63.2%) of participants participated in the school planning in the post survey.

### C. High Expectations

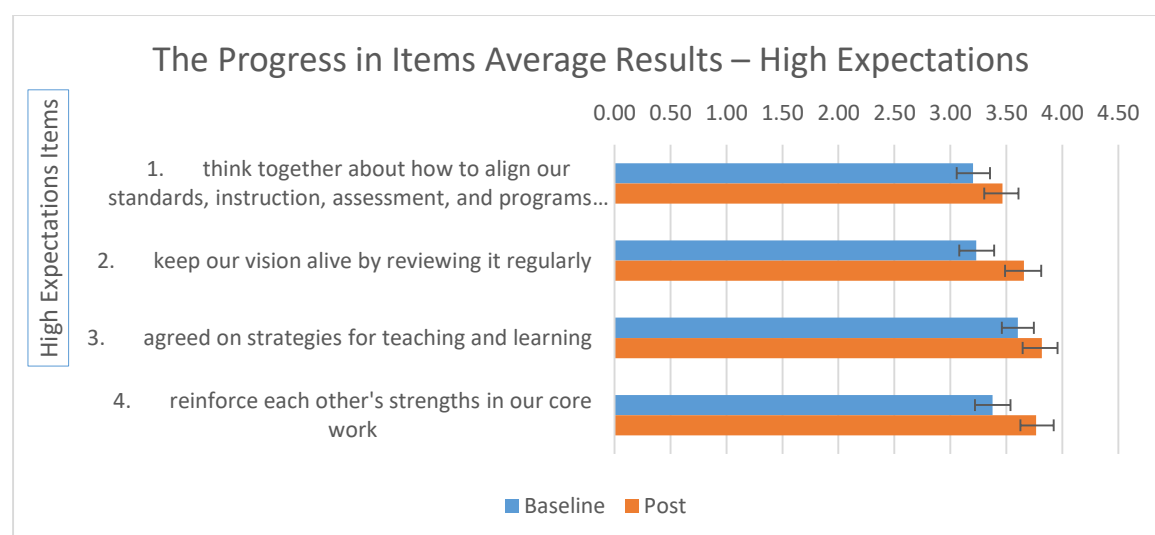
The data in Table 6.48 show that there was a slight progress in the average result of the element, from the baseline survey to the post one. Respondents believed that they kept the school vision alive by reviewing it regularly. There was an average progression of 0.5 from the baseline survey average result (3.2) to the post survey average result (3.7). These findings are graphically represented for greater clarity, in Figure 6.19.



Table 6.48: *The Progress in Items Average Results – High Expectations*

| <b>High Expectations</b>  | <b>Baseline</b> | <b>Post</b> | <b>Change</b> |
|---|-----------------|-------------|---------------|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 3.2             | 3.5         | 0.3           |
| 2. keep our vision alive by reviewing it regularly  | 3.2             | 3.7         | 0.5           |
| 3. agreed on strategies for teaching and learning   | 3.6             | 3.8         | 0.2           |
| 4. reinforce each other's strengths in our core work  | 3.4             | 3.8         | 0.4           |
| <b>Average</b>  | <b>3.4</b>      | <b>3.7</b>  | <b>0.3</b>    |

Figure 6.19: The Progress in Items Average Results – High Expectations



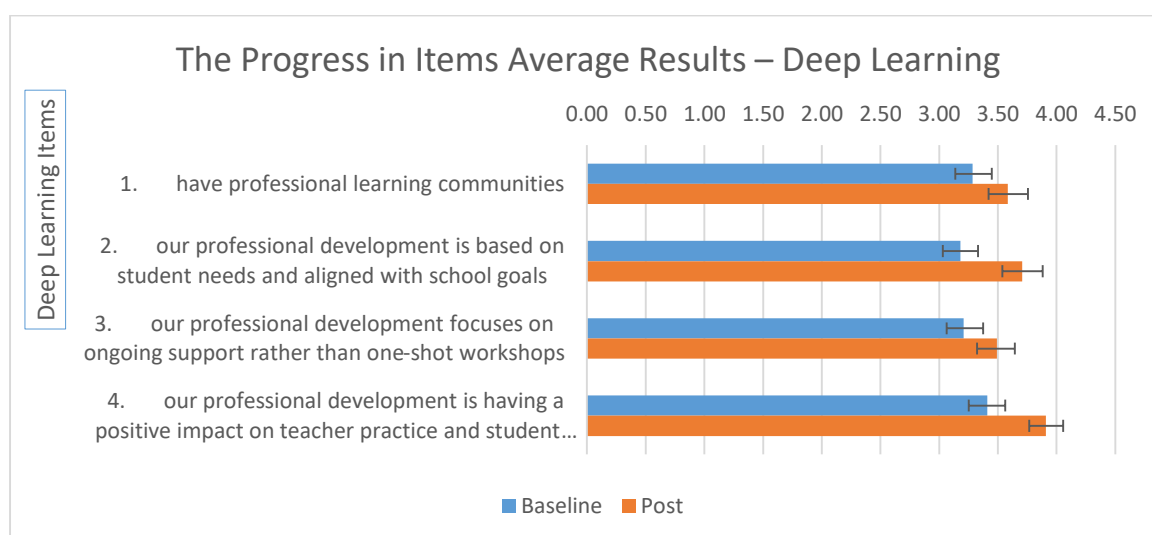
#### D. Deep Learning

The data in Table 6.49 show that there was a slight progress in the average result of the element, from the baseline survey to the post one. These findings are graphically represented by the chart, Figure 6.20, that follows.

Table 6.49: *The Progress in Items Average Results – Deep Learning*

| <b>Deep Learning</b>  | <b>Baseline</b> | <b>Post</b> | <b>Change</b> |
|---|-----------------|-------------|---------------|
| 1. <i>have professional learning communities</i>  | 3.3             | 3.6         | 0.3           |
| 2. <i>our professional development is based on student needs and aligned with school goals</i>              | 3.2             | 3.7         | 0.5           |
| 3. <i>our professional development focuses on ongoing support rather than one-shot workshops</i>            | 3.2             | 3.5         | 0.3           |
| 4. <i>our professional development is having a positive impact on teacher practice and student learning</i> | 3.4             | 3.9         | 0.5           |
| <b>Average</b>  | <b>3.3</b>      | <b>3.7</b>  | <b>0.4</b>    |

Figure 6.20: *The Progress in Items Average Results – Deep Learning*



Respondents felt that the professional development was based on student needs and aligned with the school goals. There was an average progression of 0.5 from the baseline survey average result (3.2) to the post survey average result (3.7).

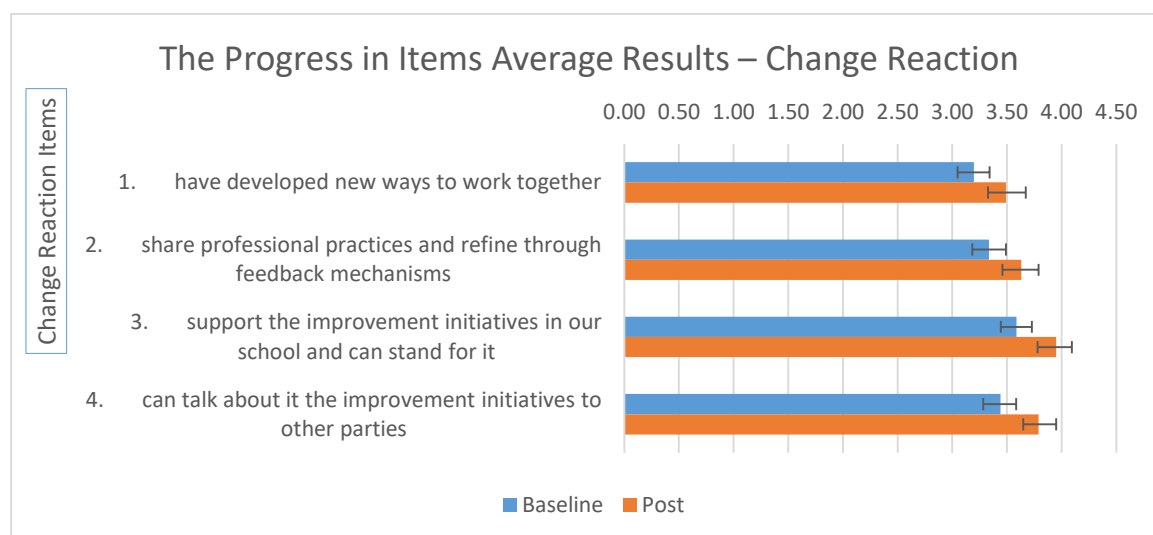
## E. Change Reaction

The data in Table 6.50 show that there was a slight progression in the average result of the element, from the baseline survey to the post one. These findings are graphically represented in Figure 6.21, to provide greater clarity.

Table 6.50: *The Progress in Items Average Results – Change Reaction*

| <b><i>Change Reaction</i></b>  | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|--|------------------------|--------------------|----------------------|
| 1. <i>have developed new ways to work together</i>                               | 3.2                    | 3.5                | 0.3                  |
| 2. <i>share professional practices and refine through feedback mechanisms</i>    | 3.3                    | 3.6                | 0.3                  |
| 3. <i>support the improvement initiatives in our school and can stand for it</i> | 3.6                    | 3.9                | 0.3                  |
| 4. <i>can talk about it the improvement initiatives to other parties</i>         | 3.4                    | 3.8                | 0.4                  |
| <b><i>Average</i></b>  | <b>3.4</b>             | <b>3.7</b>         | <b>0.3</b>           |

Figure 6.21: *The Progress in Items Average Results – Change Reaction*



Respondents believed that they could talk about the improvement initiatives to other parties. There was an average progression of 0.4 from the baseline survey average result (3.4) to the post survey average result (3.8).

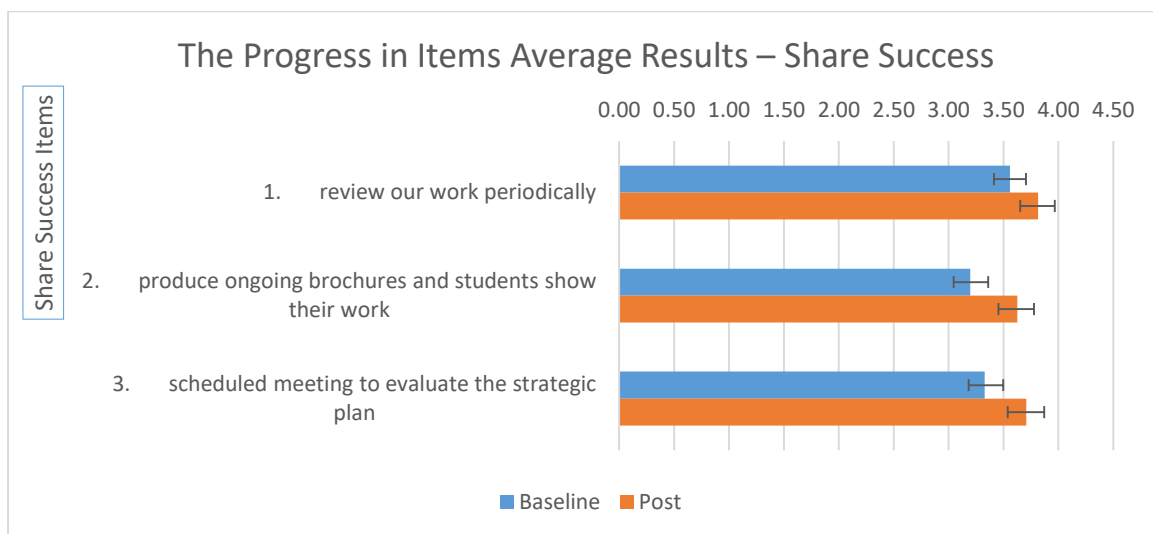
## G. Share Success

The data in Table 6.51 show that there was a slight progress in the average result of the element, from the baseline survey to the post one. These findings are graphically represented in Figure 6.22, to provide greater clarity.

Table 6.51: *The Progress in Items Average Results – Share Success*

| <i>Share Success</i>   | <i>Baseline</i> | <i>Post</i> | <i>Change</i> |
|--|-----------------|-------------|---------------|
| 1. <i>review our work periodically</i>                           | 3.7             | 4.0         | 0.3           |
| 2. <i>produce ongoing brochures and students show their work</i> | 3.2             | 3.6         | 0.5           |
| 3. <i>scheduled meeting to evaluate the strategic plan</i>       | 3.4             | 3.8         | 0.4           |
| <b><i>Average</i></b>  | 3.5             | 3.7         | 0.2           |

Figure 6.22: *The Progress in Items Average Results – Share Success*



Respondents believed that they had produced ongoing brochures and students show their work. There was an average progression of 0.5 from the baseline survey average result (3.2) to the post survey average result (3.6)

*To sum up:* Across the elements of School Capacity Building for Sustainable Improvement (SCBSI) model, all elements in the case-study schools had progressed from the baseline survey results, a finding that masked the individual changes occurring within each school, that for some were not so positive.

The data in Table 6.52 show that the average result of all the six elements of SCBSI model had progressed, from the baseline survey to the post survey.

Table 6.52: *Change in Average Results of all Schools for each of the elements of the SCBSI model*

| <b><i>SCBSI Model elements</i></b>      | <b><i>Baseline</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|---|------------------------|--------------------|----------------------|
| <i>Committing to school improvement</i> | 3.40                   | 3.49               | 0.09                 |
| <i>School diagnosis and coherence</i>   | 3.48                   | 3.68               | 0.20                 |
| <i>High Expectation</i>                 | 3.37                   | 3.57               | 0.20                 |
| <i>Deep learning</i>                    | 3.30                   | 3.56               | 0.26                 |
| <i>Change Reaction</i>                  | 3.41                   | 3.61               | 0.20                 |
| <i>Share success</i>                    | 3.37                   | 3.59               | 0.22                 |
| <b><i>Average</i></b>                   | <b>3.39</b>            | <b>3.58</b>        | <b>0.20</b>          |

There were 144 baseline survey questionnaires were collected in October 2012, while 120 post survey questionnaires were collected in June in 2013. These were analysed and the common (56) baseline survey were matched to the post surveys where both had been completed by the same person.

The data in Table 6.53 show that the average result of all the six elements of SCBSI model in the 56 surveys had progressed, from the baseline survey to the post survey.

Table 6.53: *Average Results of the element of the SCBSI model – 56 Survey*

| <b><i>SCBSI Model elements (56 surveys)</i></b> | <b><i>Base L.</i></b> | <b><i>Post</i></b> | <b><i>Change</i></b> |
|---|-----------------------|--------------------|----------------------|
| <i>Committing to school improvement</i>         | 3.52                  | 3.58               | 0.07                 |
| <i>School diagnosis and coherence</i>           | 3.64                  | 3.74               | 0.09                 |
| <i>High Expectation</i>                         | 3.47                  | 3.61               | 0.15                 |
| <i>Deep learning</i>                            | 3.34                  | 3.70               | 0.36                 |
| <i>Change Reaction</i>                          | 3.50                  | 3.72               | 0.21                 |
| <i>Share success</i>                            | 3.50                  | 3.70               | 0.20                 |
| <b><i>Average</i></b>                           | <b>3.56</b>           | <b>3.67</b>        | <b>0.11</b>          |

However, the process of school improvement had not impacted on students' performance scores in the National Examinations, though there was a slight progression from the baseline survey to the post one. This presented an interesting situation, which is explored further by looking at particular aspects in the next section that discusses cross school patterns and trends within the case-study.

## 6.6 Cross School Patterns and Trends

The case-study findings outlined in Chapter Six have been categorised into five sub headings: learner performance, the SCBSI Model, the SIP, leadership, and teachers and students, each of which is addressed subsequently.

### 6.6.1 Learner Performance

#### *QQA*

From reviewing some of school reports from the QQA, and based on the personal experience of working in QQA as a Lead Reviewer, students' achievement is one of the core indicators that the school overall judgement is based on. To measure students' achievement three areas are triangulated: student attainment, the identified standard, and student progress. According to the criteria established in the *School Review Framework and Guidance*, for a school to be judged in students' achievement as 'Inadequate' there should be evidence that "many students attain levels in tests and external examinations that are below the average achieved by students in schools that offer the same curriculum" (National Authority of Qualifications and Quality Assurance for Education and Training, 2012b, p. 33). This raised the question, in relation to the case-study four schools, in reality, was this the case?

To explore this question, consider the data in Table 6.54, which shows the National Examinations (NE) performance scores for 3<sup>rd</sup> and 6<sup>th</sup> grades for Kameela School since NE were introduced into Bahrain. Although the NE scores had shown an initial improvement between 2009 and 2010, since that time they have deteriorated across all subjects. In contrast, the school's overall effectiveness judgment awarded by the QQA (which is the same authority that conducts the NE), was increasing, being judged as 'Satisfactory' in 2008, and increased to 'Good' by 2012. This same phenomenon was also apparent to varying degrees in Jassim School, Bader School, and Mohammed School.

Table 6.54: *National Examinations Performance Scores – Kameela School – 3<sup>rd</sup> and 6<sup>th</sup> Grades*

| <i>Subject/Year</i>   |            | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <i>2013</i> | <i>2014</i> |
|-----------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>Arabic</i>         | <i>3rd</i> | 3.0         | 4.1         | 3.4         | 2.5         | 2.0         | 2.2         |
| <i>Math 3rd Grade</i> |            | 3.0         | 4.0         | 3.0         | 1.6         | 1.5         | 1.5         |
| <i>Arabic</i>         | <i>6th</i> | 4.0         | 4.3         | 3.2         | 2.2         | 1.7         | 1.1         |
| <i>Math 6th Grade</i> |            | 3.4         | 4.4         | 2.4         | 1.8         | 0.7         | 0.0         |
| <i>English</i>        | <i>6th</i> | 4.3         | 4.7         | 3.5         | 2.8         | 2.4         | 0.2         |
| <i>Science</i>        | <i>6th</i> | 3.7         | 4.4         | 3.1         | 2.2         | 1.5         | 0.4         |
| <i>QQA</i>            |            | <b>3</b>    |             |             | <b>2</b>    |             |             |

### *National Examinations*

Since 2009, students in the KoB have been required to sit NE in May of each year to take National Examinations in the four core subjects, which are Arabic, English, Math and Science. Students at the end of each Cycle, that is Grade 3 (3<sup>rd</sup> primary), Grade 6 (6<sup>th</sup> primary), Grade 9 (3<sup>rd</sup> intermediate), and Grade 12 (3<sup>rd</sup> secondary), are examined and the scores are announced and published on the Web. Table 6.55 shows students' NE performance scores in the case-study four schools deteriorated after the school improvement intervention.

Table 6.55: *National Examinations Performance Scores for the Case-Study Schools*

| <i>Grade</i> | <i>Subject</i>     | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <i>2013</i> |
|--------------|--------------------|-------------|-------------|-------------|-------------|-------------|
| <b>3</b>     | <b>Arabic</b>      | 3.1         | 4.0         | 3.2         | 2.7         | 1.7         |
|              | <b>Mathematics</b> | 3.3         | 4.7         | 3.2         | 2.0         | 1.5         |
| <b>6</b>     | <b>Arabic</b>      | 3.2         | 3.8         | 2.6         | 1.5         | 0.6         |



|                    |     |     |     |     |     |
|--------------------|-----|-----|-----|-----|-----|
| <b>Mathematics</b> | 3.2 | 4.7 | 2.8 | 1.9 | 0.4 |
| <b>English</b>     | 3.5 | 4.1 | 3.1 | 1.9 | 0.8 |
| <b>Science</b>     | 3.5 | 4.2 | 3.0 | 1.7 | 1.2 |

However, the deterioration of students' National Examinations performance scores evidenced in these four schools was not unique to them. A further analysis found this decline was evident across all schools in Bahrain since 2011, as illustrated by Table 6.56, which shows the students' NE performance scores in all schools in KoB.

Table 6.56: *National Examinations Performance Scores in all School in the KoB*

| <i>Grade</i> | <i>Subject</i>     | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <i>2013</i> | <i>2014</i> |
|--------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>3</b>     | <b>Arabic</b>      | 4.00        | 4.05        | 3.70        | 2.69        | 1.99        | 1.65        |
|              | <b>Mathematics</b> | 4           | 4.35        | 3.4         | 2.05        | 1.52        | 1.41        |
| <b>6</b>     | <b>Arabic</b>      | 4           | 3.90        | 2.50        | 1.74        | 0.96        | 0.00        |
|              | <b>Mathematics</b> | 4           | 4.05        | 2.50        | 1.83        | 0.70        | 0.00        |
|              | <b>English</b>     | 4           | 4.05        | 3.30        | 2.47        | 1.29        | 0.00        |
|              | <b>Science</b>     | 4           | 4.05        | 2.85        | 1.94        | 1.47        | 0.38        |
| <b>9</b>     | <b>Arabic</b>      | -           | 4           | 2.75        | 1.51        | 1.07        | 0.17        |
|              | <b>Mathematics</b> | -           | 4           | 3.85        | 1.77        | 1.69        | 0.00        |
|              | <b>English</b>     | -           | 4           | 4.05        | 3.31        | 3.59        | 2.39        |
|              | <b>Science</b>     | -           | 4           | 2.80        | 1.27        | 0.67        | 0.00        |

The QQA in their annual report of 2013 had also picked up this trend, but had no real explanation for this continued decrease in results. However, they raised two questions that they suggested might warrant further exploration:

- Is the continued civil disturbance of schools in the Kingdom during 2012 and 2013, affecting the lives of students, and their motivation, in more severe ways than originally expected?
- Are students' and teachers' initial enthusiasm and excitement with the National Examinations waning, particularly since the National Examinations do not count towards students' Grades and promotion to the next year? (National Authority of Qualifications and Quality Assurance for Education and Training, 2013a, p. 48).

It seems that students' National Examinations performance scores were not affected by the SIP, nor by the SCBSI practices. There was progress in the QQA review grades, though it is difficult to link that progress to the school improvement initiatives. One wonders, did MoE, Cluster Team members, SIT members, QQA focus more on the process of conducting 'outstanding practices' rather than the students' outcomes? Is there more focus on the *process* of how the school operates more than what the *outcomes* were? Or is it that student outcomes are not reflected by the results of these examinations? What was the trend in local school examinations? These findings and the associated issues raised here will be discussed further with reference to the international literature in Chapter Seven.

### ***School Examinations***

Government schools conduct local examinations to assess the performance of their students. Each school makes its own examinations for the students except at Grades 6, 9, and 12, where these level examinations are done by the MoE, though MoE does not claim

that its examinations are standardised<sup>1</sup>. Table 6.57 shows the students' performance average results in the final school examinations in the four case-study schools from grade 1 to 3.

Table 6.57: *School Final Examination Results – Case-Study Schools – 3<sup>rd</sup> Grade*

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|----------------------|---------------|----------------|----------------|-------------|----------------|
| <b>2009-2010</b>     | 74.65         | 77.45          | 79.63          | 79.92       | 77.79          |
| <b>2010-2011</b>     | 84.05         | 87.56          | 85.53          | 85.54       | 85.43          |
| <b>2011-2012</b>     | 84.33         | 91.61          | 86.62          | 86.57       | 87.28          |
| <b>2012-2013</b>     | 84.22         | 91.29          | 87.30          | 87.79       | 87.65          |

Table 6.58 shows the students' performance average results in the final school examinations in the four case-study schools from grade 4 to 6.

Table 6.58: *School Final Examinations Results – Case-Study Schools – 6<sup>th</sup> Grade*

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|----------------------|---------------|----------------|----------------|-------------|----------------|
| <b>2009-2010</b>     | 78.26         | 77.48          | 83.17          | 72.64       | 77.83          |
| <b>2010-2011</b>     | 77.99         | 77.03          | 83.75          | 72.45       | 77.79          |
| <b>2011-2012</b>     | 79.02         | 81.71          | 82.23          | 75.34       | 79.59          |
| <b>2012-2013</b>     | 76.64         | 75.53          | 80.41          | 77.13       | 77.23          |

The average results in students' final school examinations were almost the same for the past four years, including the intervention year, which is in sharp contrast with the students' performance scores in the international (TIMSS) and NE. The school examinations are not standardised, so they might give a false indication of students' performance. Moreover, as

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<sup>1</sup> At that time there were no pre-and post-moderation processes in place to ensure consistency between year cohorts or across school types.

outlined in Chapter Two, one of the MoE School Improvement Projects (SIP) is 'Performance Indicators, KPI'; of which there are 12 indicators to measure school effectiveness. Of particular interest are KPIs relating to the average results in students' final examinations and the progress in the students' final examinations average results across cohorts. What was the effect of those two indicators on the SIP and the SCBSI model? What was the effect on schools, teachers, and students' performance? Why did the MoE use a non-standard quality indicator to measure the progress the schools made? Why did the NE performance scores deteriorate over the past few years, while the school examinations averages were almost stable? How did that conflicting data affect the school performance? What about progress in students' personal development? Are there other factors at play: for example, have the characteristics of students changed? These findings and associated issues will be discussed further with reference to the international literature in Chapter Seven.

### **6.6.2 The SCBSI Model**

Across the elements of School Capacity Building for Sustainable Improvement (SCBSI) model, all elements in the schools had, on average, progressed from the baseline survey results. The average progress in the six elements was 0.2 as was shown in Chapter Six.

However, the progress in the implementation of the SCBSI was not reflected in learners' achievement data, with no noticeable impact on students' National Examinations (NE) performance scores, which generally declined over the period, nor on local school examination results, which remained relatively stable overall. The main assumption underpinning this study was that the SCBSI model would positively impact on learner achievement, as evidenced by local, national and international results. This expected result

did not occur. There are many reasons why this may be the case, one of which is the length of time needed to embed change.

School reform is a slow process, which takes anywhere from between five to ten years for a school to complete the reform and for the impact on students' outcomes to become apparent (Desimone, 2002). That this might be a factor is illustrated by students' NE results in Kameela and Mohammed Schools after one year of the intervention. As indicated by Table 6.59, Kameela students' National Examinations performance scores were slightly increased by 0.2 in Arabic in 3<sup>rd</sup> Grade, and Table 6.60, shows that Mohammed students' National Examinations performance scores were slightly increased by 0.4 in Arabic and 0.3 in Mathematics in 3<sup>rd</sup> Grade in 2014.

Table 6.59: *National Examinations Performance Scores – Kameela School – 3<sup>rd</sup>*

| <i>Subject/Year</i> |                  | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <i>2013</i> | <i>2014</i> |
|---------------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>Arabic</i>       | <i>3rd Grade</i> | 3.0         | 4.1         | 3.4         | 2.5         | 2.0         | 2.2         |
| <i>Math</i>         | <i>3rd Grade</i> | 3.0         | 4.0         | 3.0         | 1.6         | 1.5         | 1.5         |

Table 6.60: *National Examinations Performance Scores – Mohammed School – 3<sup>rd</sup>*

| <i>Subject/Year</i> |                  | <i>2009</i> | <i>2010</i> | <i>2011</i> | <i>2012</i> | <i>2013</i> | <i>2014</i> |
|---------------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <i>Arabic</i>       | <i>3rd Grade</i> | 3.3         | 4.05        | 3.2         | 3.5         | 1.8         | 2.2         |
| <i>Math</i>         | <i>3rd Grade</i> | 3.7         | 4.65        | 3.3         | 1.8         | 1.9         | 2.1         |

Source: National Authority of Qualifications and Quality Assurance for Education and Training (2015).

However, this is not enough evidence to be convinced that there is a trend towards improved achievement, as 2010 also showed some improved results, but a decline the year after. Further longitudinal studies are required to explore this further. To understand this

situation, where school results declined in National Examinations, while QQA grades increased, there are areas within the Bahrain context that must be highlighted in such a further study, such as type of teachers, type of students, and MoE practices. These issues will be discussed further with reference to the international literature in Chapter Seven.

### **6.6.3 School Improvement Project (SIP)**

The School Improvement Project (SIP) was designed to enhance the performance of government schools and to improve future career outcomes for students based on Bahrain's *Economic Vision 2030*. SIP involved significant change in schools, the MoE, and the relationship between the schools and the MoE, as outlined in Chapter Two.

The MoE conducted several school improvement projects and changed the way the directorates inside the MoE communicated with the schools. That change affected schools, but there was debate as to its value: some participants believed it was positive, and others felt that they were overworked, as illustrated by their feedback:

"The large number of improvement projects can reduce teachers' effectiveness" (JAKA).

"Improvement projects overworked teachers with filling out documents, and collecting others, they provided psychological pressure on us and had negative impact on us" (Pre/H/29).

"Professional development programmes, mostly from the Ministry..." (M/20).

"We explain to teachers the school improvement projects but they did not take them seriously. They do not believe that the projects are their own, but they are from the outside ..." (HLARI).

"Teachers were not convinced of the school improvement projects. If they know that the support group from the MoE will visit the school, they do not come to the school. Maybe if they do not know about the visit, their performance might be better. There is fear and aversion" (BHMF).

"Implementation steps were fast and the improvement projects all at the same time. Must be changed" (HLAMI).

"The nomination by the school leaders according to our positions. Projects were selected randomly by name we do not know the content of the improvement projects. There are some teachers who are able to give more but because of teaching load they refused to take extra work in improvement projects" (HLAMI).

The SIP was conducted all at once – top down -, and that might have overworked teachers and diverted them from focusing on enhancing school's outcomes as they were pre-occupied by the process of school enhancement. But teacher workload was only one of the many aspects that require consideration. The way the projects were conducted might also have had a negative influence.

Transforming schools is challenging, and there are many aspects of the school culture in general, that perpetuate traditional schooling practices, not least being parental expectations, as has already been touched on previously, and will be revisited in Chapter Seven. The Ministry of Education's approach to the change was also an important aspect. It appeared from the participants' feedback that the MoE treated the SIP as goals rather than

tools, vehicles, to improve the school outcomes. Despite the fact that the schools' overall effectiveness in QQA grades and the students' performance score had deteriorated, the MoE continued with implementing the same project without review and doing crucial amendments. In addition, the SIP was implemented in all schools using the same implementation process regardless of the school's performance level from the QQA, TIMSS or even the NE. Furthermore, these data show that the role of the Cluster Team in supporting the improvement in a school's performance needs to be investigated. Were the Cluster Team members competent enough to carry out that role effectively? Did they have the correct tools, knowledge, experience and practices to carry out the associated responsibilities effectively? How were they selected? Did they have the credibility with the school staff to enable them to carry out the role of change agent? What was the impact of their role on students' teachers, and schools' performance? These are important questions that raise further issues in relation to school improvement that will be discussed further with reference to the international literature in Chapter Seven.

#### **6.6.4 Leadership**

The evidence from the four schools that form the case-study of school improvement indicated that leadership plays a crucial role in enhancing and sustaining school performance. There are two types of leadership; one is principal leadership, and the other is teacher leadership: Utilising the SCBSI model revealed that both types of leadership exist in Bader School and Mohammed School; neither type was effectively present in Jassim School and in Kameela's school there was only one type of leadership in existence, which was teacher leadership. The following quotes from the participants illustrate how the leadership role variously took effect:



"There is a great effort by the school management in encouraging initiatives by some teachers and support student talents" (Post/B/2).

"Middle and upper leadership take the role of encouraging us. Through meetings, they support everyone to achieve the objective. They listen to the suggestions, and ask teachers about their needs to make progress" (BAES).

"..., the school principal read things in details and it took more time than expected and that hinders the achievement of the goals" (MNYA).

"Effective. But the school principal likes to work alone and with a teacher ...." (MSHSZ).

"The school environment is interesting and the school principal supports all, and human relationships. School principal does not say negative things" (MMAZ).

"We have a weekly meeting with the school principal to evaluate the plan" (Post/J/7).

A school principal is the appointed school leader in Bahrain. To take on this position, individuals are selected by the MoE to be school leaders via a process that includes an interview, an examination, a presentation, and provision of a portfolio. Is that process of recruiting school principals effective? Are those selected to be school principals in Bahrain Government schools competent enough to carry out the duties associated with the role and its wider responsibilities for change management in a time of reform? Was the accountability system in place effective enough to judge their performance? Is the professional development provided to the principals good enough to prepare them for this role and to support their development as the role changes with changes in community

expectations, legislation and teaching practices? These issues will be discussed further with reference to the international literature in Chapter Seven.

### **6.6.5 Teachers and Students**

#### ***Teachers***

Teachers are the driver for change. Participants' comments show that the teaching workforce was not stable in the Government school sector: there was a shortage of suitably skilled local teachers, so there were continuously changes in the MoE, and some of the teachers appointed were not Bahraini, and therefore on limited tenure contracts. All these aspects were factors that might have hindered the school improvement projects from being effectively implemented and sustainable, as illustrated by the following quotes:

"Because of the presence of non-Bahrainis in teaching, they are a little participation" (JASG).

".... but because of the switch in the teaching staff, we need to start with the new ones again" (MKES).

Data also shows that slightly less than quarter (24.5%) of the participants mentioned the word '*student*' in their comments, whilst the remainder focused more on the word '*teacher*'. This led to a situation where two thirds (66.6%) of respondents believed that the purpose of the school improvement process was to enhance teachers' practice, whilst only one-third (33.3%) understood that the purpose was to enhance *students'* achievement. It would seem that teachers are still 'teacher centred', despite the SIP having been put in place since 2008. Have teachers still not recognised the true purpose of school improvement initiatives? What does the effect of new –non-Bahraini limited tenure teachers have on school improvement

and the implementation of the SCBSI model? These are issues warranting further attention and will be discussed further with reference to the international literature in Chapter Seven.

### *Students*

The data from the four schools that formed the case-study showed that there was an increase in the percentage of non-Arabic students in Bahrain's Government education sector, as the following feedback confirms:

"An increase in the percentage of students whose mother tongue is not Arabic, approximately now at 30 percent" (school document).

".... we provide programmes for non-native speakers" (Pre/M/73).

"We are not responsible for the results of each student and school results because this depends on the cooperation between the school and the family, because the nature of students from different races, [cultural] environments and mostly non-Arabic speakers" (Pre/M/33).

It is clear that the characteristics of the student communities in schools in the KoB have changed over the past ten years, reflecting changes in the population profile of Bahrain as it seeks to diversify its economy and reduce its dependency on oil and gas. Due to a labour market skill shortage, immigrant workers have been brought in to fill the gaps. Many have become Bahraini citizens, bought over their families, or married into local families. Therefore, schools are challenged to meet the diversity of students from different socio-economic environments, a range of ethnic backgrounds, a variety of religions and cultures, as well as speaking different languages: today's Bahrain government schools, as well as international schools, face the challenge of educating students whose mother tongue is not Arabic, within a Middle Eastern curriculum context. Has this change affected the schools'

National Examinations performance results as well as the school overall effectiveness as designated in the QQA reports? This will be discussed further with reference to the international literature in Chapter Seven.

## **6.7. Conclusion**

This chapter identified the themes evolving from the findings from the four schools that formed this case-study of school improvement in Bahrain Government schools. From the analysis of these results, many questions have been raised that will need to be answered before an attempt can be made to explain the conditions for school improvement and describe how to measure the impact of the SCBSI model on the school and students' outcomes.

Several conclusions can be drawn from the stakeholders' perceptions of the SCBSI model. First, the findings acknowledged the need for MoE to review its SIPs and customize the school improvement approach more to suit the schools' needs and achieve relevant goals. Within the process of implementing the SCBSI model, the findings indicated agreement on the importance of the support teachers and students get in raising learner achievement levels. Second, findings indicated that the role of the leadership is fundamental in effective school improvement initiatives. Third, the findings of this study indicate there is a need to triangulate the school improvement initiatives objective, with the students' NE scores, and with the QQA grades. There was no causal relationship obvious between the progress made with regard to the SCBSI and the decline in students' NE scores, but clearly there were challenges related to raising student achievement that were not addressed by the SIP. This issue might be because participants who indicated agreement with the school improvement initiatives were more likely to rate SCBSI's steps for implementing with a high grade. This

correlation may suggest that as participants' understanding of the need for change increased they did not know whether the change had a positive impact on students' achievement. Fourth, participants also showed their anxiety about the frequent changes in teachers and students inside the schools and the impact of the school improvement initiatives on the school and on the student performance. Finally, it is acknowledged that one year is not enough to cover the entire process of the SCBSI, but the case-study provided some important findings for the school improvement in the KoB that will be discussed in more detail with reference to the international literature in Chapter Seven.

Should QQA consider both process (review schools' performance) and outcome (National Examinations performance scores) in grading schools? What is the effect on a school as a whole, when its National Examinations scores are declining, whilst at the same time QQA's review judgements indicate school performance to have improved? Which achievement standards should the Cluster Team and the SIT members utilize as goals to work towards, as quality indicators of their effectiveness in bringing about school improvement? Which evaluation measures should be given more weight, QQA review grades or students' National Examinations performance scores? The debate about process versus outcomes and the associated issues raised here will be discussed further with reference to the international literature in Chapter Seven.

# **Chapter Seven: Discussion**

## **Introduction**

This chapter discusses the findings from across the four schools that made up the Bahrain School Improvement case-study within the context of international research and current thinking on the subject, as reflected in Chapter Three. The chapter is organised according to the themes that emerged from Chapter 6, discussing in turn the findings about school and learner performance, the effectiveness of the SCBSI model that was applied, the School Improvement Project (SIP), leadership, and teachers and students within the context of current knowledge about school improvement across the globe. The journey towards the development of a new model of sustainable school improvement model is informed by this discussion. This reflective commentary has implications for the School Capacity Building for Sustainable Improvement (SCBSI) model that are detailed at the end of this chapter, but it was raises issues for implementation in other settings and for further research that are picked up again in Chapter 8.

## **7.1 School and Learner Performance**

This study found that Bahrain's primary education sector was heavily reliant on examination results as a key performance indicator of students' academic achievement and school performance. Both National Examination (NE) results and international benchmarking (TIMSS) test results were utilized as major indicators of school and learner performance, and a comparison of these found a similar pattern of (generally) declining performance emerging since 2009. Over the same period, all but one of the schools that formed the case-study within the SCBSI research received increasing ratings in their overall

effectiveness awarded by the QQA, the same authority responsible for the conduct of the National Examinations.

The apparent contradiction between declining learners' performance in the NE and the increase in the school gradings by the same authority raised an issue that warrants further exploration within the context of the literature. Barber and Mourshed (2007) argue that school reviews should measure both student outcome and the school processes, implying that the school improvement models should also take on this dual approach.

However, the Bahrain case-study results need to be further examined before any conclusions can meaningfully be drawn about this apparent contradiction of school performance against learner achievement trends. For instance, as mentioned in Chapter Two, at the time of conducting this study the MoE used non-standard local examinations as indicators for measuring learner academic achievement and schools' performance. The local examinations are not moderated, so may not be reliable for comparing students' achievements across schools nor useful as indicators of school performance. For example, if the exam is easy and students get high results, this might falsely be taken to indicate that students are performing to a high level and that the school has made good progress.

Schools do best when they compare their performance against standards (Fullan, 2000). Therefore, external accountability systems that generate data for schools to know their performance against published standards are recommended by Scheerens et al., (2001), and hence in this study the results of internationally benchmarked examinations (TIMSS) were also utilised. Clearly there is room for Bahrain to improve its inter-school, as well as intra-school moderation processes, to ensure greater consistency and therefore comparability, whether the current norm-referenced system is continued, or, alternatively, a standards-based assessment system is introduced. However, in making any changes to enhance

accountabilities, Bahrain's MoE needs to be aware of the experience of other countries. Mausethagen believes that accountability has reduced the opportunities for teachers to develop caring relationships with their students and argues that the amount of time that teachers connect with students is reduced when there is a focus on achievement targets: accountability might shift schools focus from teaching for learning to teaching for testing he argues (2013). Coe and Sahlgren also considered the impact of accountability on attainment and they found some evidence to support positive effects but they were modest and were seen to have differed from school to school (2014).

Although the main purpose of the Bahrain Education Reform was to prepare Bahrain's students for the social and economic demands of the future in order to make Bahrainis the employees of first choice (Economic Development Board, 2008), the team who were asked to develop a reform plan used academic outcomes to show that local students were not meeting the needs of the private sector as outlined in Chapter Two. The education reforms were introduced, and additional data from National Examinations collected to triangulate the Schools' Examination results, but these indicated a decline in learner achievement, a finding consistent with TIMSS rankings, which also showed that Bahrain was below the international average.

In the annual report of 2013, QQA indicated that they had no evidence to explain the continued decrease in the National Examination scores, but they highlighted that there were two additional areas worth exploring: the effect of the continued civil disturbance of schools in the Kingdom during 2012 and 2013 on students' lives and motivation, and the students' and teachers' enthusiasm and excitement with the NE, "particularly since the NEs do not count towards students' Grades and promotion to the next year?" (National Authority of Qualifications and Quality Assurance for Education and Training, 2013a, p. 48). As was noted in Chapter 6, it seems that the characteristics of students who sat the NEs before 2010



may have been different from those examined after 2010: There are now a greater diversity of students in Bahrain Government schools, many of whom do not speak Arabic and may have found the transition to a new schooling system difficult. However, this area warrants further consideration and longitudinal studies should be conducted on like-for-like groups of students to see whether they are performing at a similar level or not.

It seems then that the notion of school performance is complex and "...that simply reporting student outcomes cannot be taken as a measure of school effectiveness; to describe a school as 'effective' implies that it has done something more than simply recruit able students who would have done well even if taught badly" (Dumay, Coe, & Anumendem, 2013, p.1). Similar to Bahrain, countries like the USA and the UK have established policies to judge educational outcomes based on test scores (Aksit, 2007). However, their experience makes it clear that the performance of schools cannot be accurately assessed only in terms of the students' attainment in national or international exams (Gorard et al., 2013). If Bahrain schools are going to be able to respond to the challenges posed by the 2030 Economic Vision then, it is clear that they need to learn from international best practice and start collecting data about students' achievements from multiple sources (Creemers & Kyriakides, 2008), assessing not just academic development, but personal development and their development of employability skills. This needs to be done through a variety of assessment modes integrated within the school processes and identified for special focus by Bahrain's Ministry of Education in the implementation of the school improvement initiatives. Going forward, this needs to include a mixed methodology to measure classroom and school processes, as well as outcomes, and compare these with the school goals (Potter et al., 2002). If, as has been suggested, the schools' demographics have changed across the Kingdom in recent times, and teachers are facing the challenges of a greater proportion of non-Arabic and non-English speaking students within their classes,

then perhaps identifying base-line language competencies, and monitoring progress at each level, may be one example of an area where government-led policy could really make a difference.

In conclusion, to produce sustainable progress on students' outcomes and especially beyond schooling, there is a need to identify academic outcomes, such as students' examinations, and non-academic outcomes such as students' motivation. School performance could be judged in terms of student attendance, student enjoyment of learning, and the value added. These data can be utilised alongside moderated national and international examination results to look at the value added for individual learners, as well as to provide accountability reporting across year groups and cohorts to ensure that the government's investment in education is making a difference for the increasing diversity of learners as well as preparing its citizens for productive lives whether in the workforce or as responsible citizens able to contribute to the wider society.

## **7.2 The SCBSI Model**

The previous section appeared to indicate that the progress in the implementation of the School Capacity Building for Sustainable Improvement (SCBSI) model did not impact positively on students' NEs performance scores. There are a number of possible reasons for this, which are outlined in this section: Firstly, it seems that it takes time for any school improvement initiatives to affect the school outcomes; Secondly the model itself may not have included all the essential elements and/or the process of implementation may not have been effective; and thirdly factors outside of the school environment may have been at play, with a changed demographic evidenced across the Kingdom, as touched on in the last section.

### *Taking Time for School Improvement*

Educational change of the magnitude proposed by the educational reforms requires a transformation of existing practices and committed, well qualified teachers, and support over a long time-school improvement is not a 'quick fix'. These emerging conclusions are supported by other writers in the field, for example, Novik, Kress and Elias (2002), argue that for schools to be adaptive and know what and how to change, not only do school principals need to have a school improvement model that is clear and useful, but also they need to apply it for enough time to see the impact on students' achievement. That was the case in Bahrain, where not enough time or insufficient effort was perhaps being paid to create the conditions for building the capacity within schools to accommodate and sustain such major changes.

Students' NE results in Kameela and Mohammed Schools after one year of the intervention show that Kameela students' NEs performance scores were slightly increased by 0.2 in Arabic in 3<sup>rd</sup> Grade, and were also increased in Mohammed school by 0.4 in Arabic and 0.3 in Mathematics in 3<sup>rd</sup> Grade in 2014. So it may have been that greater improvements would have been seen, had this study been continued for a subsequent year or more. However, because improvements had also been noted in 2010, but then a decline set in subsequently, it can be seen that longitudinal studies are the only way to really come to any meaningful conclusion about the effectiveness and sustainability of school improvement strategies of any kind. For sustainable school reform it is necessary to build both school capacity and staff capabilities.

School capacity building is concerned with creating the conditions and opportunities for working collaboratively to enhance learning. Schools need to become professional learning communities where teachers participate in decision making, commit to the improvement,

and take collective responsibility towards their learning and students' outcomes (A. Harris, 2001a), but such changes require a shift of power within the schooling system, and also need consistency in leadership to enable the development of the ongoing commitment required to achieve this. All principals in the four schools that comprised this case-study were on a two-year tenure, and this in itself is an issue where school improvement is concerned. Furthermore, the schools do not recruit their own staff so, as the case-study illustrated, where a school improvement initiative is underway, and there is a change in leadership, whether it be the principal, or a key teacher as leader, then the project can easily be derailed, as that capability leaves with those skilled and knowledgeable staff. School capacity building includes activities such as preparing teachers and principals for change, and creating professional learning communities inside and outside the school (Fullan, 2000). By creating a greater base of committed teachers, the likelihood of school improvement initiatives becoming more sustainable in the event of a change in personnel is higher. However, the high reliance on expatriate teachers, with short-term contracts, and the fact that recruitment for replacement teachers is managed centrally, are factors that affect staffing continuity and commitment, and may have influenced the sustainability of the improvements evidenced in the first year of the introduction of NE.

It seems school reform is a slow process, and there is often a gap between initiating the reform at classroom level and noticing the impact on students' outcomes. This conclusion is supported by Desimone who argues that it may take years for a school improvement model or project to be implemented and for its effects to be seen. The slow pace of school improvement reform affects the ability to assess the implementation and to measure the effects on teachers' and students' learning (2002). Therefore, the effectiveness of school improvement needs further, more longitudinal research to look more closely at which of these many factors involved in the implementation warrants further attention.

### **7.3 School Improvement Project (SIP)**

The third finding that emerged from this study concerns the top down approach adopted by the MoE, which might have overworked staff, preoccupying them with the process of school enhancement and diverting them from focusing on enhancing students' achievement. It was noted in Chapter 2 that the education reforms also included a focus on leadership development, and strategic planning and goal setting, so introducing so many new initiatives at one time may have made this situation worse. This is because the SIP was implemented in all schools in the same way, regardless of a school's performance grading from the QQA, or its TIMSS and National Examinations results. It appeared that the MoE's goal became to implement the school improvement project, rather than using this approach as a tool, or vehicle, to improve school performance where it was needed. They used a 'one size fits all' approach across the whole government school sector, with understandably variable results. The next section explores this aspect further, with a focus on the school as a centre of improvement.

#### ***School as a Centre of Improvement***

A finding emerging from this case-study was that the school was not taken as a centre for improvement, and this seemed so significant that it has been taken as a theme to be further discussed. There were continuous efforts being implemented to improve all schools within Bahrain, based on the belief that education is the key for increased productivity, global competitiveness, an important element in developing human resources, and a major factor in the determination of economic returns on investments in education (Plank, 1987; Schoening, 1998). Many countries have undertaken some form of school system reform but very few have succeeded in improving their systems to a better situation (Barber &

Mourshed, 2007; Mourshed et al., 2010), so Bahrain's experience is not unique in this regard. But what can be learned from it?

As evidenced in Chapter Six (particularly Section 6.4.2) the MoE created several school improvement programmes and implemented them in schools using the same procedures regardless schools' rating from the QQA. This approach to implementation overworked teachers and did not increase students' national or international examinations scores. Therefore, Mourshed et al., advocate for a more tailored approach to be taken in order to support policymakers and school leaders in understanding how a school with starting conditions can map a path to create and sustain improvement (2010). For this approach to work, each school needs to be taken as central to the improvement for the local community, and hence for the education system as a whole, where all its parts work closely together to achieve a high level of learner academic achievement and personal development. The roles and responsibilities of school principals, senior teachers, and teachers at schools on the one hand, and Cluster Team, SIT, subject supervisors, and the Ministry of Education on the other hand, should be clearly defined and all parties must be committed to the school improvement process (Kuijpers et al., 2010). Gaining an understanding of key players' reactions and responses to education reform, which Hargreaves (2005) found in his UK study of 50 schools in the United Kingdom, differed according to their age, acceptance of the improvement, and gender, appears to be crucial for sustainable improvement. Similarly, despite the reforms implemented since 1983 in the USA, little change at either school level or with teachers was observed, (Desimone, 2002), but the difference was that this was continuously monitored at state level and consequently various changes put in place over succeeding years, culminating most recently with the Comprehensive Schoolwide Reform (CSR) approach. Learning from the experience of other countries, Bahrain's MoE needs to call in external evaluators with specialised knowledge and experience, to evaluate the

impact of the SIP on students' learning, and to provide suggestions for improvement. The suggested improvements, and any other findings from such a study, need to be discussed with the schools to ensure their commitment before implementation of any changes to the SIP. Furthermore, schools need to be involved more in the design and the evaluation phases: It is not enough for the Cluster Team to support the schools in the implementation phase only, they need to be there to support schools at all stages of the improvement cycle, as they embark on what will be a long and continuous journey towards sustainable school improvement.

### ***Cluster Team***

Though it is clearly evidenced that initiatives originating externally to the school can be more effectively implemented when provided with external support, this needs to be combined with a degree of pressure alongside, according to Fullan (1985). He maintains that pressure without support leads to unwanted behaviours such as teaching to the test, and drilling students on examination questions. Also, if a school does not know how to improve its performance, or how to build its capacity for improvement, then pressuring it will not lead to improved learning, Barber and Mourshed explain (2007). These findings have implications for enhancing the effectiveness and efficiency of the school improvement model in Bahrain.

In the Bahrain case-study, schools were supported differently according to the Cluster Team they worked with. This inconsistent support by the Cluster Teams affected schools in their implementation of the SIP. Adding to that, from participant researcher observations and the findings from this research, (particularly Section 6.3.2), it seemed that some of the Cluster Team members were not provided with the knowledge and skills that enabled them to become competent enough to support schools. A consequence reported on in Chapter 6,

(Section 6.4.2), was that they directed school staff unintentionally into the administration work, rather than focusing them on the teaching and learning and what was going on in the classroom (Harvey & Stensaker, 2008). This finding therefore suggests that a clearer role definition be provided for the role of the Cluster Team by the MoE, and that capacity and capability building be undertaken for both team members and school leadership to enhance a more collaborative partnership to school improvement initiatives undertaken in the future. Sutherland provides some guidance on this aspect, arguing that the role of the Cluster Team members should be as critical friends, observing the school practice, facilitating reflections on school performance, asking questions, probing for justification and evidence, measuring progress, providing support and guidance, and ensuring that the school is accountable (2004). The Cluster Team is responsible for ensuring good quality learning in the school, says Barber et al., (1995) and therefore, the Cluster Team members must have expertise, be resourceful and supportive in order to help facilitate the change. The implications of international experience for Bahrain's MoE are that it needs not only to set criteria for selecting the Cluster Team members, but also to ask school principals to regularly evaluate whether the support provided meets their needs and, consequently, to act to modify the SIP implementation, including the team and its operations as and when required.

### ***Managing Change***

Implementing the SIP in Bahrain Government schools without first gaining the commitment of teachers and schools might have negatively impacted on the implementation phase. Another factor already referred to, is that in Bahrain the MoE had many improvement initiatives layered one on top of another. As a participant researcher observing the effect on schools, it appeared that new initiatives, ranging from ICT to the whole school improvement approach, were being adopted with seemingly little analysis of why they were needed, nor consideration of how they fitted in with, or replaced, what was



being practiced already. Informal feedback gained on-site suggested that new initiatives were adopted before teachers had time to practice and see the benefit from the old ones, (refer Section 6.6.3), a problem also identified in other countries, according to Dougherty and Rutherford (2009). So, this is not a problem unique to Bahrain. Indeed, Fullan explains that schools are being bombarded by change, yet others say that nothing new is happening, with policy makers claiming that teachers are resistant to change, and teachers complaining that policy makers introduce change without knowing what really happens in schools (2007). This dilemma highlights the need for education change to 'make meaning': The MoE in Bahrain needs to consider the findings from this case-study and the experiences of school reforms in other countries to clarify what Bahrain needs and identify both the desired and also perhaps unintended consequences of a particular change. Therefore, it is necessary not only to know the specific consequences of educational change, but also to implement consultative processes, involving all kinds of individuals and schools in collaborative ways. To make changes that matter in students' lives is the moral purpose of schools, Fullan argues (2007), so careful consideration needs to be given in the early stages of planning to the intended outcomes to ensure that the school reforms that the MoE in Bahrain wishes to implement will indeed meet this lofty ideal.

Change initiatives fail or are not sustained when teachers are working in a negative school culture, and when schools operate within the limitations of Ministry legislative parameters and required procedures: "The problem is not the absence of innovation in schools, but rather the presence of too many disconnected, episodic, fragmented, superficially adorned projects" Fullan argues (2007, p. 13). So, in Bahrain, some change efforts must also be directed at the Ministry of Education itself, if school reforms are to be successful and sustained. The lessons learned from the successful stories of transformational change, Kotter says, are that the change process goes through a series of phases and requires a

considerable length of time (2007), and the MoE in the KoB needs to pay attention to this. The first, and most important step Kotter explains, is to create a sense of urgency, to raise awareness of the need for change. Without this vital step, the rest of the stages cannot follow effectively. So to be successful in bringing about the needed changes to the education system within Bahrain, the MoE must first raise awareness of the need for educational reforms: with an economy floundering because of reduced oil revenue, the need for diversification is critical, but it cannot be achieved until the education sector begins to graduate the skilled labour needed.

## **7.4 Leadership**

The fourth theme that emerged from this case-study is the role the leadership plays in enhancing school improvement performance and, while this aspect has already been alluded to, due to its importance it requires further attention. For successful implementation of change there needs to be leadership and direction from the Government itself, creating a country-wide impetus for change in all sectors, both private and governmental. Within the relevant ministries, in this case, the Ministry of Education, there must be the provision of leadership- a clear vision of what a successful school should look like. To some extent, as this case-study shows, the MoE in the KoB did do some work on this, developing a clear vision for a model school. However, because the recruitment process for principals was not always as effective as it could have been in appointing the people with strong leadership potential to the role, and PD was a 'one-size-fits all' that did not address the specific needs, the impact on student learning and achievement was not as successful as it could have been. The model needs refinement, clarity and a staged and supported implementation over time, as has already been emphasized.

At the school level, principals develop sustainability by encouraging the commitment of their staff, enhancing through the establishment of professional learning communities, the collaborative engagement required of deep learning, thereby ensuring the school improvement initiatives will last over time, especially after they leave (Bandur, 2012; Lewis, 2006). Principals need to involve all stakeholders effectively to understand the reasons for the improvement and provide the resources and the needed support (Mulford, 2013). They also need to support teachers to plan for improving teaching and learning by identifying and implementing strategies to facilitate a positive learning environment; they need as well, to hold teachers accountable for implementing the improvement initiatives (Whelan, 2009). This latter aspect was seen as being a problem in the Bahrain case-study, (Section 6.3.3), with many of the teachers not on board with the idea that it was they who were accountable for students' learning, in partnership with parents and the wider community. Educational systems throughout the world are holding the school leadership accountable for student performance, where student performance has become the key performance indicator used by many education policy makers (Heck & Hallinger, 2010), and the same needs to happen in Bahrain. But, as has already been highlighted earlier in this chapter, to be able to fulfil such accountability requirements, the tenure and level of authority of principals in Bahrain needs to be reviewed and broadened. Principals need to be able to recruit, select, and performance manage their staff, and they need the certainty of tenure to make what might be seen as unpopular decisions towards school improvement, with the complete backing and support of higher authorities.

Even with such changes, ensuring that every school has an effective leadership is easier said than done. It requires three things from the MoE: selecting and promoting the right people to become school leaders, creating the right professional development programmes to enhance leadership practices; and providing support and guidance, especially to the

schools identified as “less performing” (Whelan, 2009). There are a number of different models that Bahrain’s MoE could use to achieve this, one of which is by making the school principal as a role rather than a position where if the principal is not effective in enhancing students’ learning, he/she returns back to teaching rather than leaving the school; Another is that the MoE consider asking an external agency to do the process of recruiting the school principals. The first model is what is done in Saudi Arabia (SA), where teachers can become school principals and if they are not competent enough, even after many years in that role, they can return to the teaching role. In this SA model they also have a teaching load, which enables them to keep up to date with teaching and learning practices as well. The second option of utilizing external specialist expertise in recruitment assists in reducing any biases within the Ministry to recruit the most competent teachers to become principals. Either model requires training and support of those recruited for the role of principal, as the MoE understands the highly important role of school leaders in making a difference in schools. The significant role of the leadership, specifically instructional leadership, is seen as one of the characteristics found in all successful schools, Waters et al. maintain (2003). In Bahrain, the MoE had required all school principals to do at least two class observations a day and to record their visits, believing that all school principals were competent enough to take any required actions towards individual performance enhancement. However, this was not found to be that case, reinforcing the notion that school principals need ongoing support and a professional development programme to enhance their practices, including topics such as: the way to conduct class observation, evaluative writing, how to provide feedback, and how to provide support and guidance to teachers.

## 7.5 Teachers and Students

Teachers' and students' profiles were other aspects that emerged from this case-study as warranting consideration. As the economy has grown and diversified Bahrain has experienced a skills gap across most of the sectors, a problem in the education sector also. Because there has been a shortage of suitably qualified and experienced Bahraini staff, the Ministry of Education has recruited from outside the region. Privatization of education has been allowed to develop as Government provision of education has not been able to keep pace with increasing demand caused by both local demographics and immigration, with a number of international schools set up since the signing of the Free Trade agreement with the USA, some of dubious quality. The competition for qualified teachers in Bahrain has increased as the population has grown, and consequently there has been a high turnover rate within the teaching profession, as staff brought into the country are on short-term contracts but also may change sponsors if they are offered a better remuneration package. In the role of Cluster Team member, it was observed that teachers were continuously changing in the MoE and many of them were not Bahraini. Because of a shortage of teachers in Bahrain, teachers were recruited from different countries, such as Jordan, Egypt, Tunisia, and Saudi Arabia, bringing with them different educational backgrounds, philosophies of teaching and learning, and different cultural backgrounds. For the sustainability of the school improvement projects within Bahrain, the MoE needs to provide an ongoing professional development programme to induct these expatriate teachers into the new student centred ways of teaching, if it expects to see a difference in the performance, understanding, collaboration, involvement, and participation of teachers.

At the same time, it was also noted that most schools had experienced rapid roll growth, accompanied by increased diversity of students, with a rise in the percentage of non-Arabic speaking students posing special challenges to the implementation of the SIP.

This study also found evidence from teacher practices to show that school performances were being enhanced (specifically in Section 6.2.3), but this was related to their practices rather than students' performance outcomes in examinations, which was the targeted performance indicator. This finding was not unexpected as Bahrain was in the first wave of education improvement and it has been acknowledged already, that reforms take time to bed in (Kotter, 2007), and for the effects of change to be observed. It appears that this process requires more time for the teachers' focus on students' achievement to see results, but even so, this case-study shows, progress rests on some degree of continuity within the teaching profession. This conclusion is supported by Newell who explains that it has long been recognised that improving school performance requires enhancing teaching quality (1996), to make it more student-centred (Knight, 2006). The judgement on the quality of a school is reflected by the judgement on the quality of teaching: High performing teachers achieve high levels of learning, reflected in students' results (Barber & Mourshed, 2007). Therefore, teachers are the lever for effective school reform, and any achievements or progresses that students make can generally be seen to be as a result of teachers' actions (Hopkins & Stern, 1996). So this reinforces an emerging finding from this Bahrain study, where the importance of relevant and 'just-in-time' training was emphasized. But this problem is not unique to Bahrain: Inadequate training and lack of experience amongst teachers are common problems found in schools internationally (Plank, 1987), and similarly the lack of quality of teaching is often listed as a hindrance for education reform (Dello-Iacovo, 2009). This lack of quality teaching is attributed by Dello-Iacovo to the fact that teachers face difficulties with using the new teaching and learning methods and in

implementing them effectively (2009), because they come from different cultural backgrounds and receive little preparation time (Howard, 2009).

The major change required is a movement from a teacher-centred approach a towards student-centred approach (Mertkan-Ozunlu & Thomson, 2009), and so the first step to solve this problem in Bahrain is by recruiting skilful teachers. To improve its schools, the MoE in KoB therefore needs firstly to employ high performance leaders, to establish high expectations of learners, and create sound support and accountability structures. However, unless it can employ skilled, knowledgeable and high performing teachers who help every student to learn, school improvement initiatives will never succeed, Mourshed at al. argue (2010).

The second step required for Bahrain is the provision of relevant, fit-for-purpose and ongoing professional development sessions for all teachers. Several school improvement initiatives over the world have generally sought to enhance the teaching practices by improving the professional development programmes to meet the needs of teachers as well as Ministry requirements and by creating a package of teaching and learning methods to frame the good practice (Mourshed et al., 2010). In Bahrain the MoE also needs to implement on an ongoing basis, an induction course for all new teachers and especially for the non-Bahraini teachers before they start their work inside the schools. The induction course might include information about the SIP, strategies on how to achieve the expected results, and an applied section on teaching and learning methods. The aim of such teacher professional development programmes is to ensure that not only some students, but every student has access to, and the benefit of high-quality teaching. Ensuring this also requires the school to measure the impact of such programmes on students' achievements (Barber & Mourshed, 2007). The quality of teaching depends on the use of skills, a sound subject knowledge and an understanding of different pedagogical models or philosophies, all of

which impact on the way students learn (Hopkins & Stern, 1996). Therefore it is necessary for the Bahrain MoE to differentiate the professional development and the support it provides to teachers: That is effective teachers might need autonomy, whilst weaker ones will benefit more from very specific guidelines (Desimone, 2002). In addition, Bahrain's MoE should also consider other aspects of what international best practice has found makes a difference for learning by training teachers on how to coach other teachers, enter classrooms to observe learning, give feedback (Barber & Mourshed, 2007), provide support and guidance, and share ideas and plans (Fullan, 1985). In conclusion, it can be seen that effective professional development for teachers is crucial to student learning, so, it is necessary to design stimulating, practical, and effective professional development programmes (Vandenberghe, 2002) that provide practical examples during the training, support teachers inside schools by provision of a subject supervisor, and facilitate the school environment for teachers to work collaboratively to learn from each other (Barber & Mourshed, 2007).

Teachers in Bahrain faced another challenge in the implementation of new methods of teaching and learning, and that was the tension with the need to prepare students to perform well in National Examinations, a problem also found in overseas studies, where there was a focus on drilling for performance in national and international tests (Desimone, 2002), on which the performance of a teacher and the school in general will be judged on. In Bahrain, schools prepare students for the NEs from the beginning of the academic school year and consequently teachers might implement the new teaching and learning methods only if a visitor comes to the school as one of the participants in Bader School explained in (Section 6.2 in Chapter Six). One solution to this that has been suggested since 1990, is creating a professional learning community. Making the school as a learning community is one of the most effective ways to improve a school (A. Harris & Lambert, 2003), as they are known



to enhance the capacity of both the schools as a whole as well as individual teachers (Stoll et al., 2003a). Building professional learning communities is considered as vital for teacher professional development, school improvement projects and improving students outcomes (A. Harris & Lambert, 2003). Professional learning communities can be seen as purposeful arrangements for teachers to be together to examine their practice and plan for developing their professional practice and improving the school performance in a collective and collaborative way. (Groundwater-Smith & Mockler, 2009), and hence the suggestion made previously that the MoE actively encourage this next step across all schools under its control is reinforced by more recent research internationally, as well as through the outcomes of this case-study.

## **7.6 Interpretation of Findings**

Several major conclusions can be drawn from the feedback about the effectiveness and relevance of the SCBSI model gained in this case-study.

- Firstly, participants acknowledged the importance of the need for MoE to review the SIP and customize it more to suit the schools' needs and achieve its optimal goals;
- Secondly, the importance of the support teachers and students get with regard to their educational background, and the critical value of strong leadership, were identified by participants as fundamental to successful and sustainable school improvement initiatives.

- Thirdly, this study indicated that there is a need to triangulate the school improvement initiatives objectives, with the students' National Examinations performance scores, and with the QQA grades.

No apparent relationship was found between the progress made with regard to the participants' views about the SCBSI implementation and the students' National Examinations performance scores, at least in the short term, and a number of factors related to this have already been outlined. One not touched on previously is what is termed the halo effect (Kroustalis, Behrend, & Meade, 2007), whereby participants who indicated agreement with the school improvement initiatives might be more likely to rate the SCBSI elements with a high grade. This apparent correlation may suggest that, as participants' understanding of the need for change increased, they did not know whether the change had a positive impact on students' achievement.

## **7.7 How to Make the School Improvement Initiatives in the MoE in the KoB More Successful?**

Education is a multi-dimensional and complex economic sector as well as a discipline in its own right. Bahrain's cultural context, being both an Arab state and part of the oil-dependent GCC, are macro-level influences that contribute to the case-study of school effectiveness in Bahrain. The need for increased school effectiveness became a priority for the government because of high youth unemployment amid pressure for growth and diversification of the economy, as outlined in Chapter Two. Bahrain's *Economic Vision 2030* highlighted gaps between what the education system was providing and the skills required by employers and identified the need for educational reform, of which the School's

Improvement Project was just one part. So the findings from this case-study are very important for Bahrain as they provide an overview of the dynamic situation and of the key issues that make addressing school improvement very complex.

There are many variables affecting school outcomes: Some are from the school itself, the MoE, and the other external authorities such as QQA. So this is one factor that makes the issue of school improvement very complex. Another factor specific to the local context, was that there appeared to be little clarity about the vision for Schooling in Bahrain i.e. although there was vision for what a model school should look like *Bahrain Excellence School Model* (Ministry of Education Bahrain, 2011b), there were no clear targets for the learning outcomes and learner achievements expected of the school improvement initiative. Indeed, there was a focus on students' academic results as just one aspect of learner achievement, whereas there needs to be a more holistic approach to include personal development, and employability skills, for example. The narrow focus of the SIP in place in KoB government schools led to a disconnect in feedback to the schools between the QQA grading and students' external examination results, and contributed to a disenchantment with the whole improvement process. The need for a more holistic interpretation of learner achievement is supported by Crowther (2011) and similarly, by Coe and Fitz-Gibbon (1998), who believe that motivation and self-esteem might be useful additions in a more holistic approach in assessing student performance. Gorard alternatively argues that school performance can be judged in terms of student attendance, student enjoyment of learning, and the value added (2010). However, the shift from a reliance on the academic outcomes to the inclusion of a broader range of performance indicators needs to be underpinned by more knowledge about how to identify and measure the non-academic elements and greater understanding of which ones matter in schools (Ladwig, SiMoLa, & Berends, 2010). In Bahrain, for example, the gap in the labour market

for work-ready graduates identified by Coutts, Bukamal and Buheji (2014) suggests that relevant learning outcomes for students might need to include the development of employability skills, an issue that needs more investigation.

The question at the heart of this research is how to make the Bahrain school's improvement initiative more successful. To this end, a new model has been developed to achieve this goal. The new model, detailed in Figure 7.23, identifies that any school improvement initiative needs to be customized to the needs and special character of the school. It provides a systematic approach to developing an effective school improvement programme, that recognises that the 'one-size fits all' approach is not the way to succeed. In this model there is, however, a common pattern in the school improvement initiatives to be used to move from one performance stage (cluster initiatives) to the next, in accordance with advice given by Mourshed et al., who advocate for such a pattern throughout the school improvement journey (2010). In this new Model for Bahrain, the improvement system moves in a journey from one cluster of initiatives to another: from inadequate (4) to satisfactory (3); from satisfactory (3) to good (2); from good (2) to outstanding (1); and then finally there is a move to sustainable school improvement, which is to maintain the outstanding QQA grade at (1).

There is a strong correlation between the stage that a school's improvement journey is at, and the level and type of intervention (both support and guidance) from the MoE. In this Model, the schools that fall into the 'Inadequate to Satisfactory cluster', will have an intensive intervention programme involving upskilling teachers in fundamental practices, supported by coaching and frequent visits (four times a week), as shown in Figure 7.23. Associated with the provision of high level of resources, there will be constraints imposed on the curriculum, and limitations imposed on the teaching and learning processes in order to minimise the degree of variation between individual classes and across schools. This is

necessary to minimise the risk to learners whilst progress is being made to embed the fundamentals of good teaching practice. In contrast, schools in the cluster of 'Outstanding' will have much more freedom to innovate and experiment, utilizing self-learning through the community of learners' approach, but still supported by the MoE termly or seeking advice earlier, if and when they require it.

In summary, moving forward to a sustainable future for school improvement would seem to rest on three dimensions that the MoE should consider when designing and implementing an improvement journey:

- Identify schools according to their grades from the QQA and learner results, and require annual SEF to establish the starting point for the journey.
- Agree on goals in partnership with the school, in order to raise student outcomes, informed by information about its learners' performance level and specific challenges faced in Bahrain (for example increasing diversity of learners and need for a focus on language development).
- Develop prioritised action plans and provide resources and support to implement the school's improvement initiatives to meet the specific needs of each school, within its unique context.

In this new model of school improvement, schools will be clustered according to their QQA grade and learner performance results and will be located in an intervention cluster to collaborate and support each other as they take the improvement journey. As can be seen in Figure 7.23, the suggested intervention cluster model to build the school capacity as a process and help in sustaining school success allows for schools with similar areas for improvement to be networked for mutual benefit, collaborating to share ideas, solve

common problems, in effect forming a professional learning community to address together the challenges they face.

Figure 7.23: Cluster Model for SCBSI

| Improvement journey           | 4 to 3   | 3 to 2  | 2 to 1  | 1  |
|-------------------------------|--|---|---|--|
| <b>Theme</b>                  | <b>Embedding core numeracy &amp; literacy skills</b>   | <b>Getting the foundations in place</b>   | <b>Shaping the professional</b>   | <b>Improving through peers and innovation</b>  |
| <b>Intervention cluster</b>   | <b>Provide motivation and scaffolding for low skill teachers</b><br>Scripted teaching materials<br>Coaching on curriculum<br>Incentives for high performance<br>Analysis of data,  | <b>Data and accountability foundation</b><br><br>Use the data to identify and tackle specific areas for improvement   | <b>Raising calibre of entering teachers and principals</b><br>Create a system to transfer teachers to schools   | <b>Cultivating peer-led learning for teachers and principals</b><br>Professional learning communities<br>Incentives for peer-led |
| <b>Deep Learning</b>          | <b>Getting all schools to a minimum quality level</b><br>Outcome targets<br>Additional support for low performing schools<br>Schools infrastructure improvement<br><br><b>Getting students in seats</b><br>Fulfil students' basic needs to raise attendance<br>Skills for work | <b>Pedagogical foundation</b><br><br>Select a learning model consistent with raising student capabilities, and design the necessary supporting materials<br>Skills for work | <b>Raising calibre of existing teachers and principals</b><br>Provide different of professional development opportunities for self-, peer-, and centre-led learning and development<br>Increase incentive rate<br><b>School-based decision-making</b><br>Introduce self-evaluation<br>Give flexibility to pursue appropriate programmes for students<br>Skills for work | <b>Innovation across schools</b><br><br>Cluster schools sponsor innovative practices in schools employability                    |
| <b>Support &amp; guidance</b> | Educational and leadership support four times a week<br>Incentive 4%   | Education and leadership support two times a week<br>Incentive 6%   | Leadership support once in a monthly review against target<br>Incentive 8%  | Leadership share practices; Termly review against targets<br>Incentive 10%   |

## **Chapter Eight: Conclusion and Recommendations**

### **Introduction**

The idea of schools as a place of learning is a relatively modern concept in the Middle East and, whilst concern about students' failing to achieve has been longstanding amongst educators world-wide, it is only recently that failure to achieve well in school has been viewed as a problem by the wider community. As Bahrain sought to become more internationally competitive through increasing the skill level of the available labour pool those school leavers with poor levels of education find it more difficult to gain employment and this realisation was part of the economic driver that gave rise to both education and labour market reforms. The school improvement initiative, implemented in 2008, was one consequence of public interest in lifting school performance, with the expected outcome that learners' achievements, as indicated by national and internationally benchmarked examinations, would be enhanced. However, this was found not to be the case, leading to my interest, being at the time based as a Cluster Team member in the Schools' Improvement Project. I was perplexed as to why the SIP learners' performance was not improving. I was also very keen to explore the impact of the teachers' and principals' leadership roles in the process of the school improvement, as my reading at that time had suggested that these aspects were essential to bring about what was needed-a radical transformation of the education sector in Bahrain.

As a research participant, I was part of a team implementing the Bahrain Government's Schools' Improvement Programme, utilizing the SCBSI model to support the learners' performance. A longitudinal study over one year (the academic year 2012/2013) was established to answer the key research question, which was:

How to make the school improvement initiatives in the MoE in the KoB more successful?



However, in order to answer this question, a sub-set of questions was developed to guide the investigation and these were:

- What is needed for school improvement to become sustainable school success?
- How can school capacity building as a process help in building and sustaining school improvement and learner achievement?
- What type of leadership ensures building and sustaining school success?
- What is the effect of school capacity building on students' academic achievement?

This final chapter reflects on the journey that this research has taken, on the significance of school sites and the influence of the school leaders, the teachers as leaders, professional development, professional learning communities, and external and internal supporting teams, on school improvement initiatives in Bahrain's Government schools. But most of all, what remains a central underpinning driver has been my concern about students' failing to achieve.

The questions that guided this research have been addressed in detail over the preceding chapters. Here they are used broadly to summarise the findings and identify areas where further research is required.

The concept of sustainable school improvement has implications for government policy, school practices and transition to employment, which are considered in the final section of this chapter.

However, the case-study methodology applied in this study gave rise to a number of methodological issues, which are first discussed, with the aim of facilitating further research into this important topic.

## 8.1 Methodological Issues

After much thought and critical consideration of the work, it is recognised that there are some aspects that could have been done differently to enhance the research outcomes, given more time and unlimited resources.

The schools selected for inclusion in the case-study formed an opportunistic sample of only Bahrain Government primary schools, as these were easy to gain access to because of my role working in the MoE's School Improvement Project at that time. Other types of primary schools, such as Bahrain private and international schools, as well as other levels of schools, such as intermediate schools and secondary schools, were outside the scope of the present study. The emerging findings identified by this case-study need to be validated by extending across a wider range of schools both government and private, into other educational sectors, and over a longer period of time.

Furthermore, the time allocated for each interview was restricted due to the school timetable and pressures of other duties that limited participants' availability - time needed to be allocated after the interview to chat about any implications for my work with the interviewees. This gave them opportunity to talk about things that they avoided talking about during the interview, because they knew it was being recorded. On reflection these additional pieces of information, which often provided significant insights into the research, could have been better recorded in the researchers' diary for later consideration.

Not only were the number of schools limited, so too were the number of people interviewed, the number of people that participated in the questionnaire and the number that attended the meetings to discuss the emerging findings. Some writers may consider that these smallish numbers constitute a limitation on the potential credibility and confirmability of this study (A. Harris & Lambert, 2003) and hence it is recommended that further studies

build on these emerging findings by investigating school improvement initiatives across different types of schools in the Middle Eastern setting, given its unique cultural context and the lack of published research in the field.

Despite the possible critiques of bias that are commonly associated with case-studies such as this, the researcher's wider knowledge and experience of the schools' sector in Bahrain, suggest that the experiences from these four quite different schools are likely to be typical of the range of schools across the KoB. Whilst the overall findings from this case-study of school improvement are therefore likely to be representative of the experiences of many other schools, it is up to the reader to judge just how like these schools are to their own, and therefore how applicable the findings from the four Bahrain Government might be to their local context.

Further studies conducted over a longer period of time will add more to our knowledge about the important subject of school improvement, hopefully providing refinement of the Model and further recommendations that will make a difference for learning and learners. Meantime, the findings from this case-study provide some useful insights into the school improvement initiative within Bahrain and their value is local and immediate: to enhance future school improvement plans and enhance implementation of a sustainable school improvement model, moving forward.

Whilst recognised as being very important, this study did not discuss in detail leadership types nor expand on the acknowledged critical role of parents in supporting the school improvement initiative because of the limited time and the restricted scope of the research. The effect of parental expectations on students' achievement and the role of parents in supporting a sustainable school improvement model, which can meet their aspirations for their children's employability and future career development, needs to be studied in more

detail in subsequent investigations. The findings of this research in school leadership tend to agree with other research findings such as Dinham and Crowther (2011). However, further work is required to investigate the type of leadership that is most effective in a school improvement project, given the need for sustainability of the transformational educational changes accompanying labour market reforms. By its very nature the community of learners' model, with a focus on a 'distributed' leadership model as outlined variously by Dinham and Crowther (2011); A. Hargreaves and Fink (2003); A. Harris & Lambert (2003); and Muijs, Chapman and Armstrong (2013), warrants further attention.

This study identifies the elements needed for school capacity building for sustainable improvement and it has been shown that there was little that did not confirm previous research findings. However, what was clearly evident was the need for a change in emphasis from school processes and nation-wide year level results, to a focus on each individual students' learning progress and achievement, and what can be done at school level to ensure all children optimise their potential. What was shown by this case-study, although it may not be unique to the Middle-Eastern context, were the challenges facing School Improvement in a dynamic situation, with a high turnover of staff and an increasing diversity of students both posing challenges. What was unique to Bahrain's cultural context was the importance of relationships: Adopting a school improvement model that incorporated this cultural component, ensuring commitment through collaboration by the establishment of learning communities at school level, and the formation of inter-school networks to share best practices and solve common problems, were therefore success factors built into the revised School Model described at the end of Chapter Seven (Figure 7.23).

Whilst it is acknowledged that there is still more research required on many aspects, nevertheless, the findings of this study have generally succeeded in answering the key

research questions. Despite some of the limitations already outlined, the findings from the four schools individually and collectively within the case-study have provided a comprehensive, valid and fresh outlook on the topic of school improvement, leading to a new school capacity building model for sustainable improvement.

Finally, it should be noted for the record, that the researcher had invested a great deal of time and effort in collecting and analysing local school examination results in order to use them as an indicator to measure the impact of the SCBSI on students' achievement and progress in meeting expected learning outcomes. However, after due investigation it was shown that this indicator was weak in Bahrain, as the school set and assessed examinations were not pre- and post-moderated, and were not standard across all subjects and across all schools. They have therefore not been included within this final research report, but if such a study were to be replicated in another context, such local school examination results, alongside external national examination results, would naturally warrant substantive attention in assessing the effectiveness of any school improvement intervention. If this issue had been apparent before conducting the intervention, the researcher might have had more time to spend on other aspects of the research.

The next section provides a high level summary of the findings, and consolidates the further recommendations that have been made throughout Chapter Seven and in the preamble above.

## 8.2 Summary of Findings

This thesis aimed to contribute to the body of literature surrounding school capacity building and sustainable improvement. The Bahrain school improvement project case-study highlighted the importance of building school capacity for sustainable improvement through taking into account the particular school culture and context, with particular emphasis on the Middle-Eastern ‘ways of doing things’ in a country where formal education itself is a relatively recent phenomenon. This investigation revealed that there are several interrelated elements that need to be present in a school in order to build its capacity for sustainable improvement and these are reflected in a new school improvement initiatives model, described at the conclusion of Chapter Seven and illustrated by Figure 7.23. This model to enhance school improvement incorporates the key drivers for change: a committed and visionary principal, with a focus on instructional leadership, confident to allow teachers to take on greater responsibilities for change through the adoption of a distributed leadership model, facilitated through the establishment of professional learning communities and supported by external and internal supporting teams to build staff and the principal’s capacity in enhancing school improvement performance.

What was a new finding in this investigation was the change in emphasis: This case-study found that staff inside each school should work together to assess the current achievement levels and learning needs of their students, and then plan collaboratively appropriate teaching and learning strategies to meet these identified needs. Evidence-based decision making involving a range of stakeholders will allow the identification of relevant goals for each of the schools, with the MoE assisting like-schools to share best practice to build school capacity, taking into account their unique contextual factors.

The outcome of this process, and the main difference from the MoE's previous top-down approach in Bahrain Government schools, is a customised school improvement plan, with targets and timeframe that are designed and resourced to suit each schools' needs because no two schools are alike. The focus is on the learner, and so the ultimate objective of the revised school improvement model is very clearly on how to improve student learning and achievement. To achieve this objective, teachers need to be given the chance to develop professionally, to work collaboratively and to be empowered to take decisions that will result in actions that improve their school, develop their capacity for effectiveness in their professional work and enhance the outcome for learners. The overall findings from the study suggest that building school capacity and capability needs to begin with the establishment of a high level of commitment to the improvement project by firstly creating a sense of urgency and an awareness of the need for school reforms, as advocated by Kotter (2007). Providing opportunities for teachers to share their perceptions about the improvement initiatives, involving them in school decision-making and providing them with frequent opportunities for interaction through regular department and staff meetings were aspects that Mourshed (2010) suggested assisted in implementing effective school improvement. Based on this international literature about transformation in schools, this case-study found that school capacity, and the capabilities of staff were enhanced by tailored professional development programmes. Such ongoing professional upskilling programmes for teachers need to be established specifically to address each school's needs, enhancing their performance by showing them how to engage students with instructional strategies designed to effect deep learning, and then how to monitor to assess effectiveness. The continued provision of high quality, relevant education that is focused on learners is possible, according to Potter (2002), only when teachers share a common purpose and use professional learning communities to tailor their professional development programmes

according to their own identified needs. Furthermore, successful and sustained implementation of change was found to lie in the internal change management strategies that address each school's needs in a way that is appropriate to the local school context. As illustrated by this case-study, successful change implementation is generally secured in a school when all staff are sharing in the improvement initiatives, committed to these initiatives, and given the opportunity to take decisions regard their own learning requirements and their students' learning needs.

The findings presented in Chapter Seven focused on the primary findings from this study and saw how they compared with previous research conducted across the globe. The following section now brings all these data together in order to address the overarching research question that initiated this study and the four sub-research questions that were developed to guide the research itself. For readability, each section is headed by the question that drove that part of the investigation, commencing with Research Question One (RQ1), then addressing each in turn as follows, then pulling all these aspects together to address the driving question that initiated this study:

- \* RQ1: What is needed for school improvement to become sustainable school success?
- \* RQ2: How school capacity building as a process helps in building and sustaining school improvement and learner achievement?
- \* RQ3: What type of leadership ensures building and sustaining school success?
- \* RQ4: What is the effect of school capacity building on students' academic achievement?



### **8.3 RQ1: What is needed for School Improvement to Become Sustainable School Success?**

The first research question inquired about the specific needs for school improvement in the MoE in the KoB to become sustainable school success. Evidence was collected from the four school sites that constituted the case-study of school improvement utilising a range of tools (surveys, interviews, and observations) that identified several areas that impact on their performance. Most of these were related to the MoE practices in implementing and supporting the school improvement initiatives. The participants in the four schools that formed the case-study agreed that the SIP conducted by the MoE since 2008, was critically important, as it provided opportunities for teachers to perform better and for students to learn and achieve as well as their peers in other countries. Congruent with the international literature, this case-study found that the more successful schools shared high expectations for students' learning, challenging students to achieve more both academically and personally by providing a range of differentiated activities related to teaching and learning, as well as the needed support. A critical aspect for school improvement to become sustainable school success was the establishment of a learning community that involves staff and students, sharing collaboratively to meet their education needs.

However, within the case-study, it was found that each school differed in the way the SIP was implemented and supported by MoE. Participant feedback in Chapter Six indicated that many teachers believed that they were overworked. This can possibly be attributed to the number of educational reforms implemented all at once, with teacher training, leadership development for principals' and strategic planning with the establishment of KPIs, as well as the behaviour for learning programmes, all competing for teachers' attention. This overlap of reform programmes may have diverted teachers' energies and

reduced their effectiveness in enhancing students' learning. This conclusion is supported by writers such as Desimone (2002) and Fullan (2007), who suggest that some teachers become preoccupied with the teaching working load and many administrative and management responsibilities when there are too many competing projects occurring simultaneously. Therefore, what is needed for school improvement to become sustainable school success in Bahrain Government schools, is the development of a customised school improvement plan, with carefully prioritised targets a realistic timeframe that are designed and resourced to suit different schools' needs, as shown in Figure 7.23.

## **8.4 RQ2: How the School Capacity Building as a Process Helps in Building and Sustaining School Success?**

The school capacity building processes that were needed to improve and sustain success were those that directly influenced students' learning, as reflected by enhanced National Examinations performance scores. A key finding from this case-study was that many participants believed that the school improvement initiatives as implemented in Bahrain Government schools were not for the benefit of the schools and further, they thought that the SIPs, at least in the form they were delivered, were not what the schools needed. Consequently, there appeared to be little commitment to the process of school improvement. Writers such as Kuijpers, Houtveen and Wubbels (2010) suggest that making schools the centre of education sector reform is the best way to enable the process of improvement for the education system, where all its parts work closely together to achieve a high rate of progress. However, as has been shown in Chapter 6, this approach was not adopted by the MoE in Bahrain's SIP, with the result that some teachers might not have taken the school improvement initiatives seriously, thereby affecting the degree of

implementation. As has already been mentioned, creating a sense of urgency is critical to transformational change (Kotter, 2007), and consequently, raising awareness of the need for the reforms is the first step that Bahrain's MoE needs to take in establishing a strong degree of commitment for improvement. This first step of gaining commitment is crucial to sustainable school improvement.

In addition, it was found that the SIP was conducted all at once and the top-down process adopted in implementation may have diverted teachers' focus from enhancing students' achievement. Many participants believed that the way the SIP was conducted was not appropriate as it had been implemented across the board through the same implementation process in all schools regardless of a school's performance level. What was evident in this case-study was that there is a desire for change within the KoB and especially in education, driven by powerful ideas but low levels of commitment, with little attention being given to the building of capacity for implementation and measuring success. As a result, the schools' improvement reforms did not produce the expected shift in student learning outcomes, at least not in the short term. This leads to the conclusion that insufficient attention was being paid to create the conditions for building the capacity within schools to accommodate such major changes.

Furthermore, participants felt that the MoE treated the SIP as goals for school improvement rather than as tools, processes, to improve the school outcomes. It was found that the schools' overall effectiveness and the students' performance scores deteriorated since 2011, yet the MoE was still implementing the same SIP without doing crucial amendments to enhance the effectiveness of the school improvement processes. The SIP might have been better implemented if all stakeholders had been effectively involved in the design phase, thereby gaining an understanding of the reasons for the improvement. Schools needed to be provided with the resources and the needed support in the implementation

phase, and crucially, be involved in the evaluation phase. Involvement of stakeholders across all these key stages (design, implementation, evaluation and review) is necessary to build school capacity for continuous improvement and sustainability.

## **8.5 RQ3: What Type of Leadership Ensures Building and Sustaining School Success?**

This case-study showed that leadership plays a crucial role in enhancing school improvement, as illustrated particularly dramatically by one of the research sites, Jassim School, and hence the inclusion of leadership as one of the six critical elements within the SCBSI model appears to be well justified. Whilst there is a need for further research into the types of leadership that are the most effective in building sustainable school improvement, as recommended earlier in this study, it was clear that no one person can successfully lead a school, but rather schools should be led using a collaborative model that involves the participation of all through shared decision making. The distribution and instructional types of leadership as recommended by Crowther (2011) and Harris (2003) are just two of several ways in which sharing responsibilities has the potential to inform and strengthen teaching and learning. School leadership was shown in the Bahrain case-study of School Improvement as a critically important condition for effective education reform, in contrast to the findings from a USA study (Heck & Hallinger, 2010) that found that leadership ranked seventh out of eight conditions necessary to embed any new changes or innovations. This finding is due to the Arab cultural context, where power relationships are enshrined in hierarchies that reflect political and social structures, as well as familial and religious connectivity.

The concept of leadership and its effectiveness is a core theme in this case-study and considered as central to improving schools and sustaining the improvement. School principals develop sustainability by encouraging and rewarding the commitment of their staff, focusing on instructional leadership to enhance deep learning by both staff and students through establishing a community of learners' approach that will ensure the school improvement initiatives will last over time, especially after they leave, through succession planning and capacity building.

## **8.6 RQ4: What is the Effect of School Capacity Building on Students' Academic Achievement?**

As the absolute goal for education reform is to improve student achievement across the schools, there is no benefit in improving any aspect of the school if student learning is not improved. Participants believed that the school improvement initiatives have positively affected their performance, which might affect students' performance. Findings from the implementation of the SCBSI show that there was generally some progress from the baseline survey results to the post survey. However, the average results on students' final internal exams were almost the same for the past four years, including the intervention year. Unlike the students' performance scores in the school examinations, the students' performance scores in the National Examinations showed an overall decline (but within subjects and year levels some variability) since 2011. The students' achievements in all three types of assessments did not evidence the improvements that might have been expected given the improved school overall effectiveness judgments by the QQA, which is the same authority that conducts the National Examinations. From reviewing many school reports from the QQA, and based on the researcher's personal experience working in QQA

as a Lead Reviewer, it was clear that students' achievement was the critical core indicator on which the school overall judgement was to be based. The apparent contradiction of schools' QQA gradings compared with NE results was therefore of interest. Although the results in the SCBSI model and the QQA grading increased in some schools, the National Examinations scores had deteriorated. The increasing number of students of non-Bahraini origin recently enrolled in government schools was thought to be a factor behind the declining results, which show that schools might progress in the QQA visits, but deteriorated in the National Examinations scores. This is because students make progress from the starting point of schooling, but later enrolling students might not reach the standard expected of their level cohort in the National Examinations, despite evidencing personal learning progression. Indeed, findings from this case-study suggest that, with the raft of new quality assurance requirements, the MoE and schools might be unconsciously focusing more on the process of improvement rather than on learning and the students' achievement.

These apparently contradictory findings also led this case-study to question whether the SCBSI had any impact on students' learning and further, to wonder whether students' performance and students' outcomes should be broadened beyond being judged by external exams. School performance could be judged in terms of student attendance, student enjoyment of learning, and the value added. Examinations, for example, and particularly the standard national and international ones, test students' knowledge, understanding, and skills, providing an objective measure of actual outcomes. Countries like the USA and the UK have established policies to judge education outcomes based on test scores. However, it is clear that the performance of schools cannot be accurately assessed only in terms of the students' attainment in national or international exams. It might be also assessed in terms of students' personal development. Therefore, the MoE might create clear key

performance indicators to measure the students' personal development to add it to the school overall judgment. In addition, the role of MoE should focus more on enhancing student's learning and create a balanced scorecard approach to measure the impact of the school improvement initiatives, not replicating the practices of QQA.

These issues flag the need to consider the value adding aspects of schooling for individual learners as well as overall outcomes, and this area warrants further consideration and research. Schools need to assess, design, and plan their own ways to create mechanisms to implement appropriate and relevant school improvement initiatives and these need to be monitored to measure the impact on students' performance. This approach should include a mix of methodologies to measure the classroom and school processes and outcomes, and to compare these with progress made in achieving the school goals. This more integrated approach can be achieved by implementing the new cluster model proposed in Chapter Seven Figure 7.23.

## **8.7 How to Make the School Improvement Initiatives in the MoE in the KoB More Successful?**

The driving question that underpinned this research investigation was “How to make the school improvement initiatives in the MoE in the KoB more successful?” The previous sections addressed each of the sub questions that helped guide this study, but what is the overall conclusion reached after a whole year of intensive research into the case of school improvement in Bahrain? As has been shown above, schools need to be taken as the centre of improvement for the education system, where all its parts work closely together to achieve a high degree of progress. The conditions for building the school capacity, such as

teacher commitment and challenging all learners to maximise their potential, through having high expectations of learners, are critical and provide the foundation for transformational change. The SIP might be better implemented if all stakeholders were effectively involved in the design phase, understand the need for the improvement, and be involved in the evaluation phase. Additionally, schools need to be provided with the required resources and the needed support in all phases, not just implementation, including professional development programmes customised to their needs and those of individual teachers. Support and guidance to teachers' needs to be ongoing, and the effectiveness of professional development monitored to ensure that expectations for a learner-centred approach are implemented consistently inside the classrooms. Providing in-service training and coaching is essential to support teachers in their professional development, training them in how to coach other teachers, enter classes to observe learning, give feedback and share ideas and plans. Finally, students' achievement requires a more holistic approach-it cannot be assessed only in terms of the students' attainment in national and international examinations, but might be also assessed in terms of students' personal development. Therefore, the MoE needs to create suitable key performance indicators to measure the students' personal development to add it to the school overall judgment.

## **8.8 Implications for Practice**

This study confirms previous research findings, such as those of Harris and Lambert, (2003) and Fullan (2000), which suggested that school capacity building needs to be differentiated and context specific. The Model developed for an enhanced school improvement process, in the previous chapter (Chapter Seven, Figure 7.23), acknowledges the practical experience of international school improvement initiatives, but most importantly, it also



takes into account the Arab Cultural context, with its focus on relationships. With extra resources, this new enhanced school improvement model can be implemented with immediate effect into Bahrain. Because this model has been developed to suit the local situation in Bahrain Government schools, it is likely also to have applicability to the wider GCC region, with its common educational issues, religious foundation, history and language, indeed its common cultural context. However, the model for sustainable school improvement may also have utility in other parts of the world though, as mentioned previously, it is up to the reader to determine whether the findings from this case-study are applicable to their own school or relevant to their own organisational or sector situation.

The present study revealed that sustainability of improvement effort continues to be the most challenging issue facing schools working to enhance the learning outcomes for their students. Combining local findings with those of previous studies encountered in the literature review led to the conclusion that a state of sustainable improvement might be more likely to occur if schools are clustered according to their QQA grades, so they can work together for mutual benefit and shared learning. In the new school improvement model therefore, opportunities are provided for teachers to take decisions about their learning and student's performance, resulting in tailored professional development programmes via the support of the professional learning communities.

## **8.9 Recommendations for Future Research**

This research was delimited by both the length of time in the field and the number of cases that could be investigated within the resources available. A wider study to verify the emerging findings is clearly needed, as the literature suggests that the radical transformations required of the education sector may indeed take some many years to

implement. A number of topics can be further explored using this study as a basis, and these include investigating the notion of 'value-added' for individual learners as an effective indicator of a school's work and disaggregating the data to identify more clearly what are teacher effects and what are the effects of the increasingly diverse student populations on NE scores and on the QQA grading. Further work is clearly needed on the role of instructional and distributed leadership and how leadership styles impact on teacher and student performance.

Expanding this study to include a larger population could provide greater insight and useful comparisons in the MoE Government schools, and this could be further extended to encompass studies of school improvement initiatives within private schools across Bahrain. Ideally such studies would be funded to allow for longitudinal investigation, tracking students' trajectories from entry into schooling, and then into work and further education and training. Only when such longitudinal studies are carried out can the real impact of changes in teaching and learning on the development of individual students be assessed holistically, and the value-added assessed.

Although the scope of this study did not include an analysis of actual practices during implementation, qualitative methods such as direct observation, interviews, and focus groups could allow for a comparison between self-reported perceptions and actual practice in the field. These methods could also generate evidence that would allow for an analysis provide analysis to determine where challenges arise during each step of implementation.

Further research related to the teachers from outside Bahrain and their effect on the QQA results, and students National Examinations performance scores is needed to validate the findings arising from this study, to deepen our understanding of the interplay of factors at school level and to consider the implications nationally. Additional research would

continue to advance the understanding of the context and challenges under which school capacity building is effective to enhance student outcomes.

The following questions focus on some of the aspects that this study concludes warrant further exploration:

- What are the effects of new students, coming with different educational experiences and cultural backgrounds on a school's assessment results, particularly on NE scores and TIMSS results?
- What is the effect of non-Bahraini teachers on the outcomes of the school improvement project, including organisational QQA grades?
- How does instructional leadership impact on teacher and student performance, and how can it be facilitated within the workload of busy principals?

Further research should take place to know the effect of non-academic initiatives on student learning outcomes and how to create clear indicators to measure the progress of students' personal development including their development of employability skills and future career development.

## **8.10 Final Words**

This case-study comprising four school sites was conducted in order to find out how to make the school improvement initiatives in the MoE in the Kingdom of Bahrain more successful and sustainable. The investigation was carried out over a year, with a baseline of data being collected initially, followed by various interventions according to the agreed School Improvement Project plans. Feedback on the effectiveness of the SIP was gathered

using observations, a comparison of pre-and post-intervention survey results, interviews, documentary analysis, and discussions with school personnel.

A number of methodological issues were encountered of which the most significant one was the length of the intervention. The study was conducted for only one year, and it would seem that school improvement initiatives need more time to bed in before evidence of sustainable change is observed. At the closure of the research project stakeholders indicated that there was still some more work to be done before any claims could be made as to the success or otherwise of the school improvement initiative.

Emerging findings from this study reinforce the work of others, which suggests that commitment to school improvement, high expectations, professional learning, deep learning, school leadership, and reflective practice are the essential elements needed to build a school's capacity for sustainable improvement. However, the significance of this research will not be fully realised until further research is done to measure the impact of the SIP on students' learning, and to assess its value added effect longer term. The new model developed towards sustainable school improvement advocated in this thesis suggests that one size does not fit all and there should be a greater focus on the value added for individual learner in considering overall school improvement.

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# Appendices

## Appendix Chapter Two

### *Appendix 2.1 Number of Government Schools*

| <i>Type of the school</i>          | <i>Male</i> | <i>Female</i> | <i>Total</i> |
|------------------------------------|-------------|---------------|--------------|
| <b><i>Primary</i></b>              | 57          | 54            | 11           |
| <b><i>Primary Intermediate</i></b> | 13          | 8             | 21           |
| <b><i>Intermediate</i></b>         | 16          | 21            | 37           |
| <b><i>Secondary</i></b>            | 16          | 19            | 35           |
| <b><i>Religious Institute</i></b>  | 3           |               | 3            |
| <b><i>Total</i></b>                | <b>105</b>  | <b>102</b>    | <b>207</b>   |

(Ministry of Education Bahrain, 2014).

## Appendix 2.2 International Examinations (TIMSS) Scores 2003

*Bahraini students score significantly below the international average in mathematics achievements*

*Bahrain's science achievements are also below the international average*

| TIMSS 2003 – Mathematics 8 <sup>th</sup> Grade |                           |            | TIMSS 2003 – Science 8 <sup>th</sup> Grade |                           |            |
|--|---------------------------|------------|--|---------------------------|------------|
|  | Countries                 | Mean       |  | Countries                 | Mean       |
| 1  | Singapore                 | 605        | 1  | Singapore                 | 578        |
| 2  | Korea, Rep. of            | 589        | 2  | Chinese Taipei            | 571        |
| 3  | Hong Kong, SAR            | 586        | 3  | Korea, Rep. of            | 558        |
| 4  | Chinese Taipei            | 585        | 4  | Hong Kong, SAR            | 556        |
| 5  | Japan                     | 570        | 5  | Estonia                   | 552        |
| <b>TIMSS scale average (500)</b>               |                           |            |  |                           |            |
|  |                           |            | 25   | Jordan                    | 475        |
|  | <b>International Avg.</b> | <b>467</b> |  | <b>International Avg.</b> | <b>474</b> |
| 32   | Jordan                    | 424        | 33   | <b>Bahrain</b>            | <b>438</b> |
| 36   | Egypt                     | 406        | 35   | Egypt                     | 421        |
| 37   | <b>Bahrain</b>            | <b>401</b> | 39   | Saudi Arabia              | 398        |
| 43   | Saudi Arabia              | 332        | 41   | Lebanon                   | 393        |

(Mullis et al., 2003)

(Martin et al., 2003)

### Appendix 2.3 International Examinations (TIMSS) Scores 2007

*Bahraini students score significantly below the TIMSS scale average in mathematics achievements*

| TIMSS 2007 – Mathematics 8 <sup>th</sup> Grade |                |            |
|--|----------------|------------|
|  | Countries      | Mean       |
| 1  | Chinese Taipei | 598        |
| 2  | Korea, Rep. of | 597        |
| 3  | Singapore      | 593        |
| 4  | Hong Kong SAR  | 572        |
| 5  | Japan          | 570        |
| <b>TIMSS scale average (500)</b>               |                |            |
| 28   | Lebanon        | 449        |
| 31   | Jordan         | 427        |
| <b>35</b>                                      | <b>Bahrain</b> | <b>398</b> |
| 38   | Egypt          | 391        |
| 41   | Oman           | 372        |
| 44   | Kuwait         | 354        |
| 46   | Saudi Arabia   | 329        |
| 56   | Qatar          | 307        |

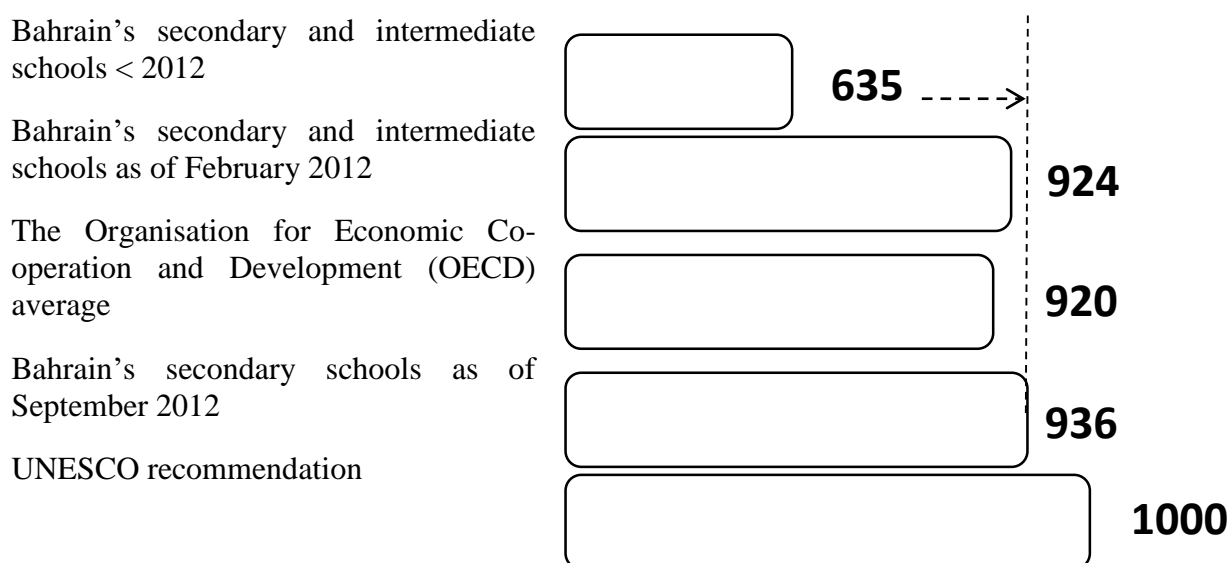
(Martin et al., 2007a)

*Bahrain's science achievements are also below the TIMSS scale average*

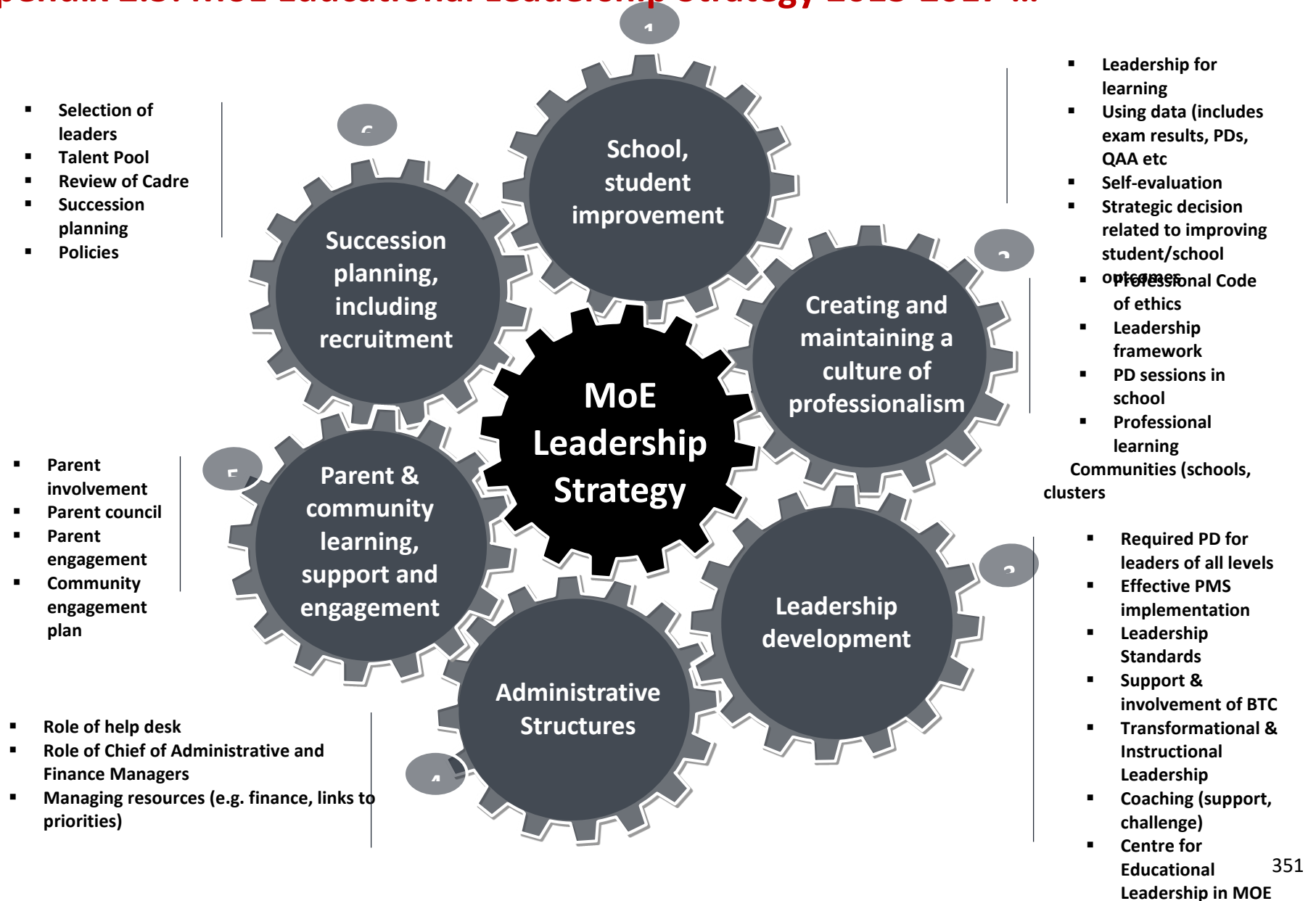
| TIMSS 2007 – Science 8 <sup>th</sup> Grade |                |            |
|--|----------------|------------|
|  | Countries      | Mean       |
| 1  | Singapore      | 567        |
| 2  | Chinese Taipei | 561        |
| 3  | Japan          | 554        |
| 4  | Korea, Rep. of | 553        |
| 5  | England        | 542        |
| <b>TIMSS scale average (500)</b>           |                |            |
| 20   | Jordan         | 482        |
| <b>26</b>                                  | <b>Bahrain</b> | <b>467</b> |
| 36   | Oman           | 423        |
| 38   | Kuwait         | 418        |
| 39   | Lebanon        | 414        |
| 40   | Egypt          | 408        |
| 43   | Saudi Arabia   | 403        |
| 46   | Qatar          | 319        |

(Martin et al., 2007b)

*Appendix 2.4 The Number of Instruction Days Progress in KoB*



## Appendix 2.5: MoE Educational Leadership Strategy 2013-2017 ...



**Appendix 2.5: TIMSS Achievement Average Scores in TIMSS 2011**

*Bahraini students score significantly below the TIMSS scale average in mathematics achievements*

*Bahrain's science achievements are also below the TIMSS scale average*

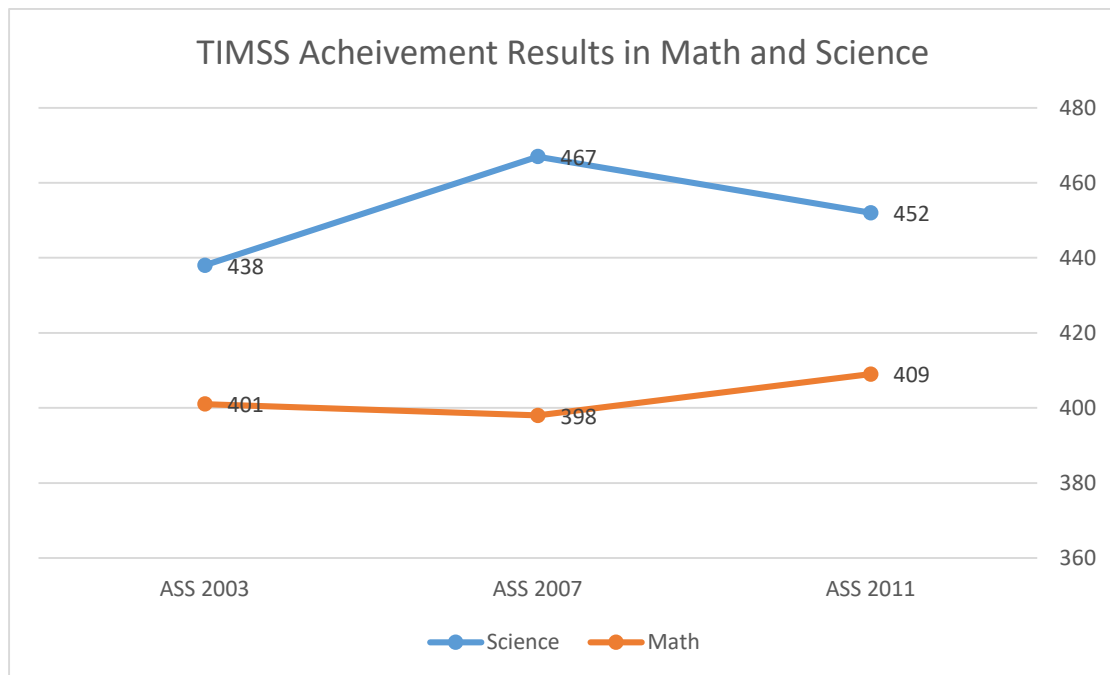
| TIMSS 2011 – Mathematics 8 <sup>th</sup> Grade |                      |            | TIMSS 2011 – Science 8 <sup>th</sup> Grade |                      |            |
|--|----------------------|------------|--|----------------------|------------|
|  | Countries            | Mean       |  | Countries            | Mean       |
| 1  | Korea, Rep. of       | 613        | 1  | Singapore            | 590        |
| 2  | Singapore            | 611        | 2  | Chinese Taipei       | 564        |
| 3  | Chinese Taipei       | 609        | 3  | Korea, Rep. of       | 560        |
| 4  | Hong Kong SAR        | 586        | 4  | Japan                | 558        |
| 5  | Japan                | 570        | 5  | Finland              | 552        |
| <b>TIMSS scale average (500)</b>               |                      |            |  |                      |            |
| 23   | United Arab Emirates | 456        | 24   | United Arab Emirates | 465        |
| 25   | Lebanon              | 449        | <b>26</b>                                  | <b>Bahrain</b>       | <b>452</b> |
| 33   | Qatar                | 410        | 28   | Jordan               | 449        |
| <b>34</b>                                      | <b>Bahrain</b>       | <b>409</b> | 31   | Saudi Arabia         | 436        |
| 35   | Jordan               | 406        | 36   | Oman                 | 420        |
| 37   | Saudi Arabia         | 394        | 37   | Qatar                | 419        |
| 41   | Oman                 | 366        | 39   | Lebanon              | 406        |

(Mullis et al., 2011)

(Martin et al., 2011)



### *Appendix 2.6 TIMSS Achievement Results 2003 - 2007*



## Appendix Chapter Five

### *Appendix 5. 7 Number of Participants*

Number of Participants within each school according to the collection methods

| <i>Collection<br/>Methods</i>                      | <i>Mohammed<br/>School</i> | <i>Bader School</i> | <i>Jassim<br/>School</i> | <i>Hakeema<br/>School</i> | <i>Total</i> |
|--|----------------------------|---------------------|--------------------------|---------------------------|--------------|
| <i>Baseline Survey<br/>Questionnaire</i>           | 37                         | 34                  | 25                       | 48                        | 144          |
| <i>Post Survey<br/>Questionnaire</i>               | 34                         | 32                  | 17                       | 37                        | 120          |
| <i>Number of<br/>Participants in<br/>Interview</i> | 9                          | 9                   | 6                        | 3                         | 27           |
| <i>SIT</i>   | 11                         | 8                   | 8                        | 13                        | 40           |
| <i>Number of<br/>Interviews</i>                    | 54                         | 54                  | 26                       | 14                        | 148          |

## ***Appendix 5.8 Research Ethics and Data Protection Monitoring Form***

**Durham University**

**School of Education**

### **Research Ethics and Data Protection Monitoring Form**

Research involving humans by all academic and related Staff and Students in the Department is subject to the standards set out in the Department Code of Practice on Research Ethics. The Sub-Committee will assess the research against the British Educational Research Association's *Revised Ethical Guidelines for Educational Research* (2004).

It is a requirement that prior to the commencement of all research that this form be completed and submitted to the Department's Research Ethics and Data Protection Sub-Committee. The Committee will be responsible for issuing certification that the research meets acceptable ethical standards and will, if necessary, require changes to the research methodology or reporting strategy.

A copy of the research proposal which details methods and reporting strategies must be attached and should be no longer than two typed A4 pages. In addition you should also attach any information and consent form (written in layperson's language) you plan to use. An example of a consent form is included at the end of the code of practice.

Please send the signed application form and proposal to the Secretary of the Ethics Advisory Committee (Sheena Smith, School of Education, tel. (0191) 334 8403, e-mail: [Sheena.Smith@Durham.ac.uk](mailto:Sheena.Smith@Durham.ac.uk)). Returned applications must be either typed or word-processed and it would assist members if you could forward your form, once signed, to the Secretary as an e-mail attachment

Name: Ahmed A.Karim AlKoofi

Course: PhD

Contact e-mail address: a.a.alkoofi@durham.ac.uk Supervisor: Allen Thurston

Title of research project: **Tatweer Project**

## Questionnaire

|    |   | YES | NO |  |
|----|---|-----|----|--|
| 1. | Does your research involve living human subjects?   | x   |    | IF NOT, GO TO DECLARATION AT END                   |
| 2. | Does your research involve only the analysis of large, secondary and anonymised datasets?                                   |     | x  | IF YES, GO TO DECLARATION AT END                   |
| 3a | Will you give your informants a written summary of your research and its uses?  | x   |    | If NO, please provide further details and go to 3b |
| 3b | Will you give your informants a verbal summary of your research and its uses?   | x   |    | If NO, please provide further details              |
| 3c | Will you ask your informants to sign a consent form?  | x   |    | If NO, please provide further details              |
| 4. | Does your research involve covert surveillance (for example, participant observation)?                                      |     | x  | If YES, please provide further details.            |
| 5a | Will your information <i>automatically</i> be anonymised in your research?  | x   |    | If NO, please provide further details and go to 5b |
| 5b | IF NO<br><br>Will you explicitly give <i>all</i> your informants the right to remain anonymous?                             |     |    | If NO, why not?                                    |
| 6. | Will monitoring devices be used openly and only with the permission of informants?  | x   |    | If NO, why not?                                    |
| 7. | Will your informants be provided with a summary of your research findings?  | x   |    | If NO, why not?                                    |
| 8. | Will your research be available to informants and the general public without restrictions placed by sponsoring authorities? | x   |    | If NO, please provide further details              |
| 9. | Have you considered the implications of your research intervention on your informants?                                      | x   |    | Please provide full details                        |

|     |  |  |   |   |
|-----|--|--|---|---|
| 10. | Are there any other ethical issues arising from your research? |  | x | If YES, please provide further details. |
|-----|--|--|---|---|

Further details

9-Data from teachers will be treated confidentially. There may be a tension for teachers working in a school that is needing/wanting to improve and sharing thoughts about this process. Clear distinction will be made between the management of change and teacher views on the change process. If teachers are finding change emotionally difficult, they will be signposted to support services (e.g. counselling, career guidance).

Continuation sheet YES (delete as applicable)

### ***Declaration***

I have read the Department's Code of Practice on Research Ethics and believe that my research complies fully with its precepts. I will not deviate from the methodology or reporting strategy without further permission from the Department's Research Ethics Committee.

Signed Date: 05 Sep. 12

**SUBMISSIONS WITHOUT A COPY OF THE RESEARCH PROPOSAL WILL NOT BE CONSIDERED.**

## **Participant Information Sheet**

**for**

### **School Capacity Building for Sustainable Improvement Project**

You are being invited to take part in a research study on School Capacity Building and Sustaining the Improvement. The reason we have contacted you is because we would like to implement "Tahseen" model in four schools in Bahrain and your school is one of them. It is a process of school improvement that is designed to create and sustain enhanced success. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Please ask Ahmed AlKoofi (a.a.alkoofi@durham.ac.uk) if there is anything you do not understand or if you would like further information.

The project is part of Ahmed's PhD degree at Durham University, UK. It is hoped that the project could provide useful information to improve the process of school improvement in Bahrain. This study is designed to find out how to make the Model of Excellence School in the MOE in the KOB more successful.

You will be asked to fill out two questionnaires; one at the beginning of school year and the other one at the end of it. They will take 15 minutes each from your time. Some of the staff will also be asked to be interviewed for 10 minutes for six times during the whole school year. All the questions will be related to the improvement process "Tahseen". We will send the questionnaires for you to fill out at your convenience. All information obtained during the study will be confidential.

We hope that you feel able to help us with this study. If at any time you decide that you do not want to continue to take part in the study, you are free to withdraw.

If you would like to discuss anything further, please contact Ahmed at [a.a.alkoofi@durham.ac.uk](mailto:a.a.alkoofi@durham.ac.uk) or by telephone on 33191414.

If you wish to complain about any aspect of this work or have additional enquiries about the work then please feel free to also contact Dr Allen Thurston, School of Education, Durham University, Leazes Road, Durham. DH1 1HT, UK. Or [allen.thurston@durham.ac.uk](mailto:allen.thurston@durham.ac.uk)

Yours sincerely

Allen Thurston

Ahmed AlKoofi

**Consent Form**  
**for**  
**School Capacity Building for Sustainable Improvement Project**

I/we understand the aims of the project.

I/we have been informed of the study and understand what data will be collected, how data will be stored and how data will be used.

I/we have decided that I will participate in this study.

I/we am/are happy to complete interviews and questionnaires as outlined on the participants information sheet and for this data to be used by the research team for analysis and reporting.

I/we understand that I can withdraw from this study at any time.

Participant's name \_\_\_\_\_

Participant's signature\_\_\_\_\_

Project team member's name \_\_\_\_\_

Project team member's signature\_\_\_\_\_

Date\_\_\_\_\_

## Appendix 5.9 Baseline Survey

### Baseline Survey (beginning of the academic school year)

This school survey is designed to assess the capacity building of your school. All information provided will be treated confidentially within the project team and no individual or school will be identified in any report. The items are clustered according to the elements of the SCBSI model. The number 1-5 scale represent the following:

1 = We do not do this at our school.      2 = We are starting to move in this direction.

3 = We are making good progress here.    4 = We have this condition well established.

5 = We are refining our practice in this area.

Name: \_\_\_\_\_ Role: \_\_\_\_\_ School: \_\_\_\_\_

Circle the rating for each item and tally the score for each column first, then add the results for each column together and transfer the results to the scoring box on the last page.

#### A. Committing to school improvement.

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. believe the improvement effort will enhance current practice   | 1 | 2 | 3 | 4 | 5 |
| 2. know what we want to achieve from the process of the improvement   | 1 | 2 | 3 | 4 | 5 |
| 3. know the reason for undergoing the process of the improvement  | 1 | 2 | 3 | 4 | 5 |
| 4. changed the culture of how people operate together   | 1 | 2 | 3 | 4 | 5 |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns)    \_\_\_\_    \_\_\_\_    \_\_\_\_    \_\_\_\_    \_\_\_\_  
=

*Please explain your response by telling us about a couple of specific examples:*

#### B. School diagnosis and coherence.

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. share and understand the school vision   | 1 | 2 | 3 | 4 | 5 |
| 2. Know the function of the support we get from the Cluster Teams                   | 1 | 2 | 3 | 4 | 5 |
| 3. All actively involved in school planning processes                               | 1 | 2 | 3 | 4 | 5 |
| 4. All assume collective responsibility for individual students and school outcomes | 1 | 2 | 3 | 4 | 5 |



Total (add circled numbers down and then across columns) \_\_\_\_ \_  
=

Please explain your response by telling us about a couple of specific examples:

---

### C. High Expectations.

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 1 | 2 | 3 | 4 | 5 |
| 2. keep our vision alive by reviewing it regularly  | 1 | 2 | 3 | 4 | 5 |
| 3. agreed on strategies for teaching and learning   | 1 | 2 | 3 | 4 | 5 |
| 4. reinforce each other's strengths in our core work  | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_ \_  
=

Please explain your response by telling us about a couple of specific examples:

---

### D. Deep learning

*In our school, (we):*

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. have professional learning communities  | 1 | 2 | 3 | 4 | 5 |
| 2. our professional development is based on student needs and aligned with school goals              | 1 | 2 | 3 | 4 | 5 |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 1 | 2 | 3 | 4 | 5 |
| 4. our professional development is having a positive impact on teacher practice and student learning | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_ \_  
=

Please explain your response by telling us about a couple of specific examples:

---

### E. Change Reaction

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. have developed new ways to work together                               | 1 | 2 | 3 | 4 | 5 |
| 2. share professional practices and refine through feedback mechanisms    | 1 | 2 | 3 | 4 | 5 |
| 3. support the improvement initiatives in our school and can stand for it | 1 | 2 | 3 | 4 | 5 |
| 4. can talk about it the improvement initiatives to other parties         | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_  
=

Please explain your response by telling us about a couple of specific examples:

---

**F. Share success**

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. review our work periodically                           | 1 | 2 | 3 | 4 | 5 |
| 2. produce ongoing brochures and students show their work | 1 | 2 | 3 | 4 | 5 |
| 3. scheduled meeting to evaluate the strategic plan       | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_  
=

Please explain your response by telling us about a couple of specific examples:

---

Scoring: Add totals for each section. Possible average can be find by dividing the possible number of scores for each section by the 5. Sections with the lowest scores are those in greatest need of attention. A score of 1 or 2 in the survey represents areas of greatest need, 3, and 4 represent strengths, and 5 represents exemplary work that reflects high leadership capacity.

| Sections                            | Score | Average |
|-------------------------------------|-------|---------|
| A. Committing to school improvement | _____ | _____   |
| B. School diagnosis and coherence   | _____ | _____   |
| C. High Expectations                | _____ | _____   |
| D. Deep learning                    | _____ | _____   |
| E. Change reaction                  | _____ | _____   |

## Appendix 5.10 Post Survey

### Post Survey (end of the academic school year)

We would like to thank you for the commitment you have shown throughout the past academic school year. As we reach the final stages of the project, we would appreciate feedback from you about key aspects of the project. The feedback you provide will help inform our planning and thinking for future projects. All information provided will be treated confidentially within the project team and no individual or school will be identified in any report. The items are clustered according to the elements of the SCBSI model. The number 1-5 scale represent the following:

1 = We do not do this at our school.      2 = We are starting to move in this direction.

3 = We are making good progress here.    4 = We have this condition well established.

5 = We are refining our practice in this area.

Name: \_\_\_\_\_ Role: \_\_\_\_\_

School: \_\_\_\_\_

Circle the rating for each item and tally the score for each column first, then add the results for each column together and transfer the results to the scoring box on the last page.

#### A. Committing to school improvement.

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. believe the improvement effort will enhance current practice   | 1 | 2 | 3 | 4 | 5 |
| 2. know what we want to achieve from the process of the improvement   | 1 | 2 | 3 | 4 | 5 |
| 3. know the reason for undergoing the process of the improvement  | 1 | 2 | 3 | 4 | 5 |
| 4. changed the culture of how people operate together   | 1 | 2 | 3 | 4 | 5 |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns)    \_\_\_\_    \_\_\_\_    \_\_\_\_    \_\_\_\_    \_\_\_\_  
=

Please explain your response by telling us about a couple of specific examples:

#### B. School diagnosis and coherence.

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. share and understand the school vision   | 1 | 2 | 3 | 4 | 5 |
| 2. Know the function of the support we get from the Cluster Teams                   | 1 | 2 | 3 | 4 | 5 |
| 3. All actively involved in school planning processes                               | 1 | 2 | 3 | 4 | 5 |
| 4. All assume collective responsibility for individual students and school outcomes | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_  
=

Please explain your response by telling us about a couple of specific examples:

---

**C. High Expectations.**

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 1 | 2 | 3 | 4 | 5 |
| 2. keep our vision alive by reviewing it regularly  | 1 | 2 | 3 | 4 | 5 |
| 3. agreed on strategies for teaching and learning   | 1 | 2 | 3 | 4 | 5 |
| 4. reinforce each other's strengths in our core work  | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_  
=

Please explain your response by telling us about a couple of specific examples:

---

**D. Deep learning**

*In our school, (we):*

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. have professional learning communities  | 1 | 2 | 3 | 4 | 5 |
| 2. our professional development is based on student needs and aligned with school goals              | 1 | 2 | 3 | 4 | 5 |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 1 | 2 | 3 | 4 | 5 |
| 4. our professional development is having a positive impact on teacher practice and student learning | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_  
=

Please explain your response by telling us about a couple of specific examples:

---

**E. Change Reaction**

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. have developed new ways to work together                               | 1 | 2 | 3 | 4 | 5 |
| 2. share professional practices and refine through feedback mechanisms    | 1 | 2 | 3 | 4 | 5 |
| 3. support the improvement initiatives in our school and can stand for it | 1 | 2 | 3 | 4 | 5 |
| 4. can talk about it the improvement initiatives to other parties         | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns) \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_  
=

*Please explain your response by telling us about a couple of specific examples:*

---

**F. Share success**

*In our school, (we):*

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. review our work periodically                           | 1 | 2 | 3 | 4 | 5 |
| 2. produce ongoing brochures and students show their work | 1 | 2 | 3 | 4 | 5 |
| 3. scheduled meeting to evaluate the strategic plan       | 1 | 2 | 3 | 4 | 5 |

Total (add circled numbers down and then across columns)    \_\_\_\_    \_\_\_\_    \_\_\_\_    \_\_\_\_    \_\_\_\_  
=

*Please explain your response by telling us about a couple of specific examples:*

---

Scoring: Add totals for each section. Possible average can be find by dividing the possible number of scores for each section by the 5. Sections with the lowest scores are those in greatest need of attention. A score of 1 or 2 in the survey represents areas of greatest need, 3, and 4 represent strengths, and 5 represents exemplary work that reflects high leadership capacity.

| Sections                            | Score | Average |
|-------------------------------------|-------|---------|
| F. Committing to school improvement | _____ | _____   |
| G. School diagnosis and coherence   | _____ | _____   |
| H. High Expectations                | _____ | _____   |
| I. Deep learning                    | _____ | _____   |
| J. Change reaction                  | _____ | _____   |
| K. Share success                    | _____ | _____   |

### Appendix 5.11 Daily Research Journal

***School Code:***

*Date:*

**Item Code:**

***Summary of what is accomplished / observed:***

### Activity:

---

**Time:**

**Place:**

---

***Reflection:***

*Suggestions for next time:*

***Progress I made:***

### ***Appendix 5.12 Interview – Committing to School Improvement***

#### **Semi-Structured Questions:**

1. Do school staff believe the improvement effort will enhance current practices? How?
2. Do you know what you want to achieve from the process of the improvement? Give examples, please.
3. How is the improvement team created in the school? Do you think it will be effective?
4. How will the improvement process change the culture of how people operate together?
5. Do you think school staff will contribute significantly to the improvement effort and continue to contribute to its implementation? Give examples please.
6. Are school staff familiar with and can accurately explain the improvement projects? How?
7. Do you believe the school or Cluster Teams will support your needs to succeed? How?
8. Do you feel confident and comfortable in implementing this improvement process? How?
9. Does the school practices in this stage different than last year practices? How?

Teacher's code: \_\_\_\_\_

Notes:

### ***Appendix 5.13 Interview – School Diagnosis and Coherence***

#### **Semi-Structured Questions:**

1. How has the school set its vision and values?
2. Do you know the function of the support you get from the Cluster Team? What is it?
3. How are you all actively involved in school planning processes?
4. How all staff assume collective responsibility for individual students and school outcomes?
5. Describe the culture of work? Has school established a culture of "no blame"?
6. Does the school practices in this stage different than last year practices? How?

Teacher's code: \_\_\_\_\_

Notes:

### *Appendix 5.14 Interview – High Expectations*

#### **Semi-Structured Questions:**

1. How are you going to participate in building the school vision?
2. How are you going to align your school standards, instruction, assessment, and programs with its vision?
3. How are you planning for the strategies of teaching and learning?
4. How are you reinforcing each other's strengths in your core work? Give an example.
5. Does the school practices in this stage different than last year practices? How?

*Teacher's code:*\_\_\_\_\_

*Notes:*



### *Appendix 5.15 Interview – Deep Learning*

#### **Semi-Structured Questions:**

1. How do you benefited from the professional learning communities?
2. Are the opportunities for professional development enough? Why?
3. Are SIT meetings productive and focused around school improvement? Give examples.
4. How is your professional development is based on students needs and aligned with school goals? Give examples.
5. What are the type of support you get from your professional development?
6. Do you use and share the strategies and information you have learned through professional development opportunities? How?
7. Do you think your professional development is having a positive impact on your practice and student learning?
8. Does the school practices in this stage different than last year practices? How?

*Teacher's code:* \_\_\_\_\_

**Notes:**

### ***Appendix 5.16 Interview – Change Reaction***

#### **Semi-Structured Questions:**

1. What are the new ways the school has developed for you to work together?
2. Have you joined with networks of other schools and programs inside and outside Bahrain? Give examples.
3. Have students share in internal and external activities? Give example
4. Have you or the school share professional practices and refine through feedback mechanisms? How? Give examples.
5. Have you supported the improvement initiatives in your school and stand for it? Give examples.
6. Have you talked about the improvement initiatives to other parties? Give examples.
7. Does the school practices in this stage different than last year practices? How?

*Teacher's code:*\_\_\_\_\_

*Notes:*

### ***Appendix 5.17 Interview – Sharing Success***

#### **Semi-Structured Questions:**

1. Have you reviewed your work or the school's work periodically? How?
2. What are the brochures the school produces? Who produces them?
3. Are there meetings to evaluate the strategic plan? Who participate in those meeting? What do you think of them?
4. Does the school practices in this stage different than last year practices? How?

*Teacher's code:*\_\_\_\_\_

*Notes:*

### ***Appendix 5.18 Interview Consent Letter***

The study we would like you to participate in is PhD study, exploring school capacity building and sustain the improvement.

Specifically we would like to invite you to participate in the focus case studies that will be carried out as part of this research. In particular we would like you to share with us your experience of School Capacity Building and Sustain the Improvement (SCBSI) model.

As a participant in this study, your role is to help us to get a better understanding of school capacity building and sustain the improvement on student's learning experiences. There are six interviews throughout the whole academic year.

This involves discussing in further detail your experiences with regard to SCBSI model. The interview will be recorded on a digital recorder machine. Each interview will last for 15 – 25 minutes. Therefore, forgive me if I stop you at any stages during the interview.

All the data is protected, and your identity will be anonymous and that only the research team will have access to the data. Neither your name, nor the name of the school will be used in the research.

Thank you for your involvement.

***Note: participants sign the consent form.***

#### ***Participants Information:***

|  |       |
|--|-------|
| Name:  | _____ |
| School Name:                                   | _____ |
| Position in the school:                        | _____ |
| Subject teaching:                              | _____ |
| Number of years working in this school:        | _____ |
| Number of years working in the MOE:            | _____ |
| Staff code ( <i>given by the researcher</i> ): | _____ |

*Appendix 5.19 Interview Table*

| <i>School Code</i> | <i>Staff Code</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> |
|--------------------|-------------------|----------|----------|----------|----------|----------|----------|
| <b><i>BPBS</i></b> | BSKA              |          |          |          |          |          |          |
|                    | BMH               |          |          |          |          |          |          |
|                    | BAYY              |          |          |          |          |          |          |
|                    | BEAA              |          |          |          |          |          |          |
|                    | BHKE              |          |          |          |          |          |          |
|                    | BAES              |          |          |          |          |          |          |
|                    | BAHK              |          |          |          |          |          |          |
|                    | BHMF              |          |          |          |          |          |          |
|                    | BAJE              |          |          |          |          |          |          |

## Appendix Chapter Six

### Appendix 6.20 Baseline Survey – Committing to School Improvement – Mohammed School

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 5.4%     | 13.5%    | 35.1%    | 40.5%    | 5.4%     |
| 2. know what we want to achieve from the process of the improvement   | 8.1%     | 10.8%    | 27.0%    | 40.5%    | 13.5%    |
| 3. know the reason for undergoing the process of the improvement  | 11.1%    | 2.8%     | 19.4%    | 52.8%    | 13.9%    |
| 4. changed the culture of how people operate together   | 8.1%     | 8.1%     | 10.8%    | 54.1%    | 18.9%    |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 5.4%     | 13.5%    | 27.0%    | 35.1%    | 18.9%    |
| <b>Overall Average</b>  | 7.6%     | 9.8%     | 23.9%    | 44.6%    | 14.1%    |

### Appendix 6.21 Baseline Survey – Diagnosis and Coherence – Mohammed School

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 2.7%     | 8.1%     | 13.5%    | 54.1%    | 21.6%    |
| 2. Know the function of the support we get from the Cluster Teams                   | 5.4%     | 16.2%    | 21.6%    | 45.9%    | 10.8%    |
| 3. All actively involved in school planning processes                               | 2.7%     | 13.5%    | 27.0%    | 40.5%    | 16.2%    |
| 4. All assume collective responsibility for individual students and school outcomes | 8.1%     | 2.7%     | 32.4%    | 45.9%    | 10.8%    |
| <b>Overall Average</b>  | 4.7%     | 10.1%    | 23.6%    | 46.6%    | 14.9%    |

**Appendix 6.22 Baseline Survey – High Expectations – Mohammed School**

| <b>High Expectations</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 8.3%     | 16.7%    | 25.0%    | 38.9%    | 11.1%    |
| 2. keep our vision alive by reviewing it regularly  | 2.8%     | 11.1%    | 27.8%    | 36.1%    | 22.2%    |
| 3. agreed on strategies for teaching and learning   | 2.7%     | 8.1%     | 13.5%    | 45.9%    | 29.7%    |
| 4. reinforce each other's strengths in our core work  | 5.4%     | 10.8%    | 16.2%    | 40.5%    | 27.0%    |
| <b>Overall Average</b>  | 4.8%     | 11.6%    | 20.5%    | 40.4%    | 22.6%    |

**Appendix 6.23 Baseline Survey – Deep Learning – Mohammed School**

| <b>Deep Learning</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| 1. have professional learning communities  | 8.1%     | 8.1%     | 24.3%    | 43.2%    | 16.2%    |
| 2. our professional development is based on student needs and aligned with school goals              | 5.4%     | 5.4%     | 32.4%    | 45.9%    | 10.8%    |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 2.7%     | 5.4%     | 29.7%    | 37.8%    | 24.3%    |
| 4. our professional development is having a positive impact on teacher practice and student learning | 2.7%     | 8.1%     | 29.7%    | 45.9%    | 13.5%    |
| <b>Overall Average</b>   | 4.7%     | 6.8%     | 29.1%    | 43.2%    | 16.2%    |

**Appendix 6.24 Baseline Survey – Change Reaction – Mohammed School**

| <b>Change Reaction</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. have developed new ways to work together                               | 2.8%     | 5.6%     | 27.8%    | 50.0%    | 13.9%    |
| 2. share professional practices and refine through feedback mechanisms    | 2.8%     | 5.6%     | 19.4%    | 44.4%    | 27.8%    |
| 3. support the improvement initiatives in our school and can stand for it | 2.8%     | 2.8%     | 19.4%    | 58.3%    | 16.7%    |
| 4. can talk about it the improvement initiatives to other parties         | 2.8%     | 2.8%     | 25.0%    | 44.4%    | 25.0%    |
| <b>Overall Average</b>  | 2.8%     | 4.2%     | 22.9%    | 49.3%    | 20.8%    |

**Appendix 6.25 Baseline Survey – Share Success – Mohammed School**

| <b>Share Success</b>                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. review our work periodically                           | 2.8%     | 2.8%     | 27.8%    | 44.4%    | 22.2%    |
| 2. produce ongoing brochures and students show their work | 2.9%     | 2.9%     | 28.6%    | 45.7%    | 20.0%    |
| 3. scheduled meeting to evaluate the strategic plan       | 2.9%     | 17.6%    | 20.6%    | 38.2%    | 20.6%    |
| <b>Overall Average</b>                                    | 2.9%     | 7.6%     | 25.7%    | 42.9%    | 21.0%    |

***Appendix 6.26 List of Actions taken to Improve Mohammed School's Performance***

- Built the teachers' development plans based on the strategic plan
- Changed the way they conducted class observation. From class observation to more on providing support and guidance to teachers inside classrooms.
- Principal allocated more time to listen to teachers.
- A bag contained the rules of the school, educational materials and some reports about the school performance was given to the new teachers.
- Preparing students for the National Examinations started at the beginning of the year unlike previous years, where they started a month before the exams were conducted.
- The SIT conducted many meetings to put the vision in actions in order to achieve it.
- The issues from the QQA report were addressed in the strategic plan.
- ICT specialist provided more support to teachers inside classroom to implement the ICT in learning.
- Some SIP's leaders were changed especially those who are overworked.
- The school contacted a committee outside the school to provide support to the non-Arabic speaking students. This committee spoke the same language the students spoke.



**Appendix 6.27 Interviewees Information – Mohammed School**

| <b><i>School Code</i></b> | <b><i>Participant Code</i></b> | <b><i>Position</i></b>     | <b><i>Subject teach</i></b> | <b><i>Years in school</i></b> | <b><i>Years in MoE</i></b> | <b><i>Comments</i></b>            |
|---------------------------|--------------------------------|----------------------------|-----------------------------|-------------------------------|----------------------------|-----------------------------------|
| <b><i>MPBS</i></b>        | MMAA                           | Social councilor           | -                           | 7 years                       | 13 years                   | -                                 |
|                           | MSHSZ                          | Learning centre specialist | -                           | 3 years                       | 10 years                   | -                                 |
|                           | MRAJ                           | Senior teacher             | Class teacher               | 3 years                       | 11 years                   | -                                 |
|                           | MNYA                           | Senior teacher             | Sport                       | 2 years                       | 12 years                   | She attends 2 days in this school |
|                           | MMAZ                           | Senior teacher             | Science                     | 2 years                       | 14 years                   | She attends 2 days in this school |
|                           | MAMD                           | Senior teacher             | Islamic                     | 1 year                        | 11 years                   | She attends 2 days in this school |
|                           | MHKA                           | Senior teacher             | English                     | 3 years                       | 13 years                   | She attends 2 days in this school |
|                           | MMJS                           | ICT specialist             | Computer                    | 5 years                       | 5 years                    | -                                 |
|                           | MKES                           | Principal                  | -                           | 3 years                       | 18 years                   | -                                 |

**Appendix 6.28 Post Survey – Committing to School Improvement – Mohammed School**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 3.2%     | 9.7%     | 29.0%    | 45.2%    | 12.9%    |
| 2. know what we want to achieve from the process of the improvement   | 3.1%     | 9.4%     | 21.9%    | 34.4%    | 31.3%    |
| 3. know the reason for undergoing the process of the improvement  | 6.3%     | 6.3%     | 25.0%    | 21.9%    | 40.6%    |
| 4. changed the culture of how people operate together   | 3.2%     | 9.7%     | 41.9%    | 32.3%    | 12.9%    |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 3.2%     | 6.5%     | 25.8%    | 41.9%    | 22.6%    |
| <b>Overall Average</b>  | 3.8%     | 8.3%     | 28.7%    | 35.0%    | 24.2%    |

**Appendix 6.29 Post Survey – Diagnosis and Coherence – Mohammed School**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 5.9%     | 2.9%     | 11.8%    | 38.2%    | 41.2%    |
| 2. Know the function of the support we get from the Cluster Teams                   | 2.9%     | 2.9%     | 11.8%    | 52.9%    | 29.4%    |
| 3. All actively involved in school planning processes                               | 2.9%     | 5.9%     | 20.6%    | 38.2%    | 32.4%    |
| 4. All assume collective responsibility for individual students and school outcomes | 2.9%     | 8.8%     | 5.9%     | 70.6%    | 11.8%    |
| <b>Overall Average</b>  | 3.7%     | 5.1%     | 12.5%    | 50.0%    | 28.7%    |

**Appendix 6.30 Post Survey – High Expectations – Mohammed School**

| <b>High Expectations</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 2.9%     | 8.8%     | 20.6%    | 64.7%    | 2.9%     |
| 2. keep our vision alive by reviewing it regularly  | 2.9%     | 0.0%     | 20.6%    | 41.2%    | 35.3%    |
| 3. agreed on strategies for teaching and learning   | 5.9%     | 2.9%     | 5.9%     | 67.6%    | 17.6%    |
| 4. reinforce each other's strengths in our core work  | 8.8%     | 2.9%     | 5.9%     | 67.6%    | 14.7%    |
| <b>Overall Average</b>  | 5.1%     | 3.7%     | 13.2%    | 60.3%    | 17.6%    |

**Appendix 6.31 Post Survey – Deep Learning – Mohammed School**

| <b>Deep Learning</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| 1. have professional learning communities  | 2.9%     | 11.8%    | 11.8%    | 32.4%    | 41.2%    |
| 2. our professional development is based on student needs and aligned with school goals              | 5.9%     | 2.9%     | 11.8%    | 35.3%    | 44.1%    |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 2.9%     | 2.9%     | 32.4%    | 50.0%    | 11.8%    |
| 4. our professional development is having a positive impact on teacher practice and student learning | 5.9%     | 2.9%     | 11.8%    | 41.2%    | 38.2%    |
| <b>Overall Average</b>   | 4.4%     | 5.1%     | 16.9%    | 39.7%    | 33.8%    |

**Appendix 6.32 Post Survey – Change Reaction – Mohammed School**

| <b>Change Reaction</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. have developed new ways to work together                               | 5.9%     | 5.9%     | 20.6%    | 41.2%    | 26.5%    |
| 2. share professional practices and refine through feedback mechanisms    | 5.9%     | 5.9%     | 17.6%    | 41.2%    | 29.4%    |
| 3. support the improvement initiatives in our school and can stand for it | 2.9%     | 8.8%     | 8.8%     | 35.3%    | 44.1%    |
| 4. can talk about it the improvement initiatives to other parties         | 2.9%     | 5.9%     | 2.9%     | 50.0%    | 38.2%    |
| <b>Overall Average</b>  | 4.4%     | 6.6%     | 12.5%    | 41.9%    | 34.6%    |

**Appendix 6.33 Post Survey – Share Success – Mohammed School**

| <b>Share Success</b>                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. review our work periodically                           | 5.9%     | 5.9%     | 8.8%     | 41.2%    | 38.2%    |
| 2. produce ongoing brochures and students show their work | 5.9%     | 5.9%     | 11.8%    | 58.8%    | 17.6%    |
| 3. scheduled meeting to evaluate the strategic plan       | 5.9%     | 2.9%     | 20.6%    | 26.5%    | 44.1%    |
| <b>Overall Average</b>                                    | 5.9%     | 4.9%     | 13.7%    | 42.2%    | 33.3%    |

***Appendix 6.34 First Cycle Grade – School Examinations Results – Mohammed School***

Students' average results in the internal final school exams in the core four subjects (First Cycle – grade 1 to 3) – **Mohammed School**

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|----------------------|---------------|----------------|----------------|-------------|----------------|
| <b>2009-2010</b>     | 72.82         | 87.01          | 78.77          | 77.71       | <b>77.69</b>   |
| <b>2010-2011</b>     | 87.17         | 94.21          | 85.64          | 87.08       | <b>87.53</b>   |
| <b>2011-2012</b>     | 84.79         | 97.49          | 87.53          | 88.98       | <b>89.7</b>    |
| <b>2012-2013</b>     | 85.66         | 99.18          | 88.04          | 90.87       | <b>90.91</b>   |

***Appendix 6.35 Second Cycle Grade – School Examinations Results – Mohammed School***

Students' average results in the internal final school exams in the core four subjects (Second Cycle – grade 4) – **Mohammed School**

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|----------------------|---------------|----------------|----------------|-------------|----------------|
| <b>2009-2010</b>     | 82.04         | 90.75          | 81.55          | 71.06       | <b>81.06</b>   |
| <b>2010-2011</b>     | 81.47         | 84.36          | 82.12          | 70.88       | <b>79.71</b>   |
| <b>2011-2012</b>     | 77.07         | 86.74          | 81.99          | 71.93       | <b>79.43</b>   |
| <b>2012-2013</b>     | 77.55         | 91.24          | 87.98          | 76.99       | <b>82.69</b>   |

**Appendix 6.36 3<sup>rd</sup> Grade National Examinations Performance Scores – Mohammed School**

**NPS = Normalised Percentage Score**

**PS = Performance Score**

| <b>2009</b>                           |               |             |              |             |
|---------------------------------------|---------------|-------------|--------------|-------------|
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>66</b>     | <b>3.3</b>  | <b>68</b>    | <b>3.7</b>  |
| <b><i>Governorate Performance</i></b> | <b>67</b>     | <b>3.5</b>  | <b>68</b>    | <b>3.8</b>  |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>4.0</b>  | <b>70</b>    | <b>4.0</b>  |
| <b>2010</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>70</b>     | <b>4.05</b> | <b>72</b>    | <b>4.65</b> |
| <b><i>Governorate Performance</i></b> | <b>68</b>     | <b>3.75</b> | <b>69</b>    | <b>4.25</b> |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>4.05</b> | <b>70</b>    | <b>4.35</b> |
| <b>2011</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>67</b>     | <b>3.2</b>  | <b>70</b>    | <b>3.3</b>  |
| <b><i>Governorate Performance</i></b> | <b>68</b>     | <b>3.4</b>  | <b>70</b>    | <b>3.3</b>  |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>3.7</b>  | <b>70</b>    | <b>3.4</b>  |
| <b>2012</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>69</b>     | <b>2.5</b>  | <b>68</b>    | <b>1.8</b>  |

|                                |               |            |              |            |
|--------------------------------|---------------|------------|--------------|------------|
| <i>Governorate Performance</i> | <b>71</b>     | <b>2.8</b> | <b>72</b>    | <b>2.3</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.7</b> | <b>70</b>    | <b>2.1</b> |
| <b>2013</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>69</b>     | <b>1.8</b> | <b>73</b>    | <b>1.9</b> |
|                                | <b>70</b>     | <b>2.0</b> | <b>71</b>    | <b>1.7</b> |
| <i>Governorate Performance</i> | <b>70</b>     | <b>2.0</b> | <b>71</b>    | <b>1.7</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
| <b>2014</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>73</b>     | <b>2.2</b> | <b>75</b>    | <b>2.1</b> |
|                                | <b>73</b>     | <b>2.2</b> | <b>73</b>    | <b>1.8</b> |
| <i>Governorate Performance</i> | <b>73</b>     | <b>2.2</b> | <b>73</b>    | <b>1.8</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |

**Appendix 6.37 Baseline Survey – Committing to School Improvement – Bader School**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 0.0%     | 26.5%    | 23.5%    | 50.0%    | 0.0%     |
| 2. know what we want to achieve from the process of the improvement   | 0.0%     | 8.8%     | 52.9%    | 35.3%    | 2.9%     |
| 3. know the reason for undergoing the process of the improvement  | 2.9%     | 0.0%     | 44.1%    | 47.1%    | 5.9%     |
| 4. changed the culture of how people operate together   | 0.0%     | 14.7%    | 41.2%    | 38.2%    | 5.9%     |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 0.0%     | 11.8%    | 52.9%    | 26.5%    | 8.8%     |
| <b>Overall Average</b>  | 0.6%     | 12.4%    | 42.9%    | 39.4%    | 4.7%     |

**Appendix 6.38 Baseline Survey – Diagnosis and Coherence – Mohammed School**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 0.0%     | 5.9%     | 44.1%    | 47.1%    | 2.9%     |
| 2. Know the function of the support we get from the Cluster Teams                   | 2.9%     | 14.7%    | 32.4%    | 38.2%    | 11.8%    |
| 3. All actively involved in school planning processes                               | 0.0%     | 17.6%    | 35.3%    | 35.3%    | 11.8%    |
| 4. All assume collective responsibility for individual students and school outcomes | 0.0%     | 0.0%     | 29.4%    | 67.6%    | 2.9%     |
| <b>Overall Average</b>  | 0.7%     | 9.6%     | 35.3%    | 47.1%    | 7.4%     |



**Appendix 6.39 Baseline Survey – High Expectations – Bader School**

| <b>High Expectations</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 0.0%     | 17.6%    | 47.1%    | 32.4%    | 2.9%     |
| 2. keep our vision alive by reviewing it regularly  | 0.0%     | 14.7%    | 44.1%    | 38.2%    | 2.9%     |
| 3. agreed on strategies for teaching and learning   | 0.0%     | 11.8%    | 50.0%    | 32.4%    | 5.9%     |
| 4. reinforce each other's strengths in our core work  | 0.0%     | 5.9%     | 47.1%    | 35.3%    | 11.8%    |
| <b>Overall Average</b>  | 0.0%     | 12.5%    | 47.1%    | 34.6%    | 5.9%     |

**Appendix 6.40 Baseline Survey – Deep learning – Bader School**

| <b>Deep Learning</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| 1. have professional learning communities  | 0.0%     | 14.7%    | 38.2%    | 44.1%    | 2.9%     |
| 2. our professional development is based on student needs and aligned with school goals              | 2.9%     | 20.6%    | 58.8%    | 14.7%    | 2.9%     |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 11.8%    | 17.6%    | 44.1%    | 26.5%    | 0.0%     |
| 4. our professional development is having a positive impact on teacher practice and student learning | 2.9%     | 11.8%    | 38.2%    | 47.1%    | 0.0%     |
| <b>Overall Average</b>   | 4.4%     | 16.2%    | 44.9%    | 33.1%    | 1.5%     |

**Appendix 6.41 Baseline Survey – Change Reaction – Bader School**

| <b>Change Reaction</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. have developed new ways to work together                               | 0.0%     | 14.7%    | 52.9%    | 32.4%    | 0.0%     |
| 2. share professional practices and refine through feedback mechanisms    | 0.0%     | 17.6%    | 50.0%    | 32.4%    | 0.0%     |
| 3. support the improvement initiatives in our school and can stand for it | 0.0%     | 5.9%     | 41.2%    | 41.2%    | 11.8%    |
| 4. can talk about it the improvement initiatives to other parties         | 0.0%     | 11.8%    | 50.0%    | 35.3%    | 2.9%     |
| <b>Overall Average</b>  | 0.0%     | 12.5%    | 48.5%    | 35.3%    | 3.7%     |

**Appendix 6.42 Baseline Survey – Share Success – Bader School**

| <b>Share Success</b>                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. review our work periodically                           | 0.0%     | 14.7%    | 32.4%    | 47.1%    | 5.9%     |
| 2. produce ongoing brochures and students show their work | 2.9%     | 14.7%    | 47.1%    | 32.4%    | 2.9%     |
| 3. scheduled meeting to evaluate the strategic plan       | 2.9%     | 14.7%    | 44.1%    | 38.2%    | 0.0%     |
| <b>Overall Average</b>                                    | 2.0%     | 14.7%    | 41.2%    | 39.2%    | 2.9%     |

***Appendix 6.43 List of Actions taken to Improve Bader School's Performance***

- Established professional learning communities.
- Two of the SIP leaders were changed because of their performance.
- Two professional development sessions were given to teachers in how to observe classes and give constructive feedback.
- Higher leadership and middle ones attended classes with the Cluster Team to review the classes and provide support and guidance to the teachers.
- The school vision was revised and changed.
- The social counselor provided support and guidance to other schools.
- Middle leadership participated in supporting other schools.
- A selected group of students were trained to do action researches to improve the practices inside schools.
- Students' National Examinations scores and internal examinations results were analyzed and presented to all teachers.
- The school started to embed the National Examinations questions into the curriculum and activities from the first primary.
- All teachers took a role to enhance students' performance in the National Examinations.
- Mock examinations were conducted periodically.
- A very few teachers were set with by the Cluster Team to show them the purpose of the SIP.

*Appendix 6.44 Interviewees Information – Bader School*

| <i>School Code</i> | <i>Participant Code</i> | <i>Position</i>     | <i>Subject teach</i> | <i>Years in school</i> | <i>Years in MoE</i> | <i>Comments</i> |
|--------------------|-------------------------|---------------------|----------------------|------------------------|---------------------|-----------------|
| <i>BPBS</i>        | BSKA                    | Teacher             | Arabic               | 5 years                | 13 years            | -               |
|                    | BMH                     | Senior teacher      | Class teacher        | 1 year                 | 15 years            | -               |
|                    | BAYY                    | SEN specialist      | -                    | 12 years               | 18 years            | -               |
|                    | BEAA                    | Senior teacher      | Science              | 1 year                 | 12 years            | -               |
|                    | BHKE                    | Teacher             | Islamic              | 3 years                | 3 years             | -               |
|                    | BAES                    | Social councilor    | -                    | 11 years               | 12 years            | -               |
|                    | BAHK                    | Senior teacher      | Math                 | 11 years               | 21 years            | -               |
|                    | BHMF                    | Principal assistant | -                    | 5 years                | 25 years            | -               |
|                    | BAJE                    | Principal           | -                    | 3 years                | 32 years            | -               |

**Appendix 6.45 Post Survey – Committing to School Improvement – Bader School**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 0.00%    | 0.00%    | 15.63%   | 84.38%   | 0.00%    |
| 2. know what we want to achieve from the process of the improvement   | 0.00%    | 6.25%    | 21.88%   | 71.88%   | 0.00%    |
| 3. know the reason for undergoing the process of the improvement  | 0.00%    | 0.00%    | 21.88%   | 78.13%   | 0.00%    |
| 4. changed the culture of how people operate together   | 0.00%    | 3.13%    | 37.50%   | 56.25%   | 3.13%    |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 0.00%    | 6.25%    | 62.50%   | 25.00%   | 6.25%    |
| <b>Overall Average</b>  | 0.00%    | 3.13%    | 31.88%   | 63.13%   | 1.88%    |

**Appendix 6.46 Post Survey – Diagnosis and Coherence – Bader School**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 0.00%    | 6.25%    | 9.38%    | 81.25%   | 3.13%    |
| 2. Know the function of the support we get from the Cluster Teams                   | 6.25%    | 6.25%    | 18.75%   | 68.75%   | 0.00%    |
| 3. All actively involved in school planning processes                               | 0.00%    | 0.00%    | 40.63%   | 31.25%   | 28.13%   |
| 4. All assume collective responsibility for individual students and school outcomes | 0.00%    | 3.13%    | 12.50%   | 81.25%   | 3.13%    |
| <b>Overall Average</b>  | 1.56%    | 3.91%    | 20.31%   | 65.63%   | 8.59%    |

**Appendix 6.47 Post Survey – High Expectations – Bader School**

| <b>High Expectations</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| <i>1. think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 3.13%    | 3.13%    | 50.00%   | 43.75%   | 0.00%    |
| <i>2. keep our vision alive by reviewing it regularly</i>  | 0.00%    | 3.13%    | 34.38%   | 59.38%   | 3.13%    |
| <i>3. agreed on strategies for teaching and learning</i>   | 0.00%    | 6.25%    | 18.75%   | 71.88%   | 3.13%    |
| <i>4. reinforce each other's strengths in our core work</i>  | 0.00%    | 3.13%    | 28.13%   | 68.75%   | 0.00%    |
| <b>Overall Average</b>   | 0.78%    | 3.91%    | 32.81%   | 60.94%   | 1.56%    |

**Appendix 6.48 Post Survey – Deep Learning – Bader School**

| <b>Deep Learning</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| <i>1. have professional learning communities</i>  | 0.00%    | 3.13%    | 46.88%   | 50.00%   | 0.00%    |
| <i>2. our professional development is based on student needs and aligned with school goals</i>              | 3.13%    | 3.13%    | 37.50%   | 56.25%   | 0.00%    |
| <i>3. our professional development focuses on ongoing support rather than one-shot workshops</i>            | 3.13%    | 3.13%    | 28.13%   | 62.50%   | 3.13%    |
| <i>4. our professional development is having a positive impact on teacher practice and student learning</i> | 0.00%    | 3.13%    | 21.88%   | 75.00%   | 0.00%    |
| <b>Overall Average</b>  | 1.56%    | 3.13%    | 33.59%   | 60.94%   | 0.78%    |

**Appendix 6.49 Post Survey – Change Reaction – Bader School**

| <b>Change Reaction</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. have developed new ways to work together                               | 0.00%    | 0.00%    | 53.13%   | 46.88%   | 0.00%    |
| 2. share professional practices and refine through feedback mechanisms    | 0.00%    | 3.13%    | 21.88%   | 75.00%   | 0.00%    |
| 3. support the improvement initiatives in our school and can stand for it | 0.00%    | 0.00%    | 18.75%   | 81.25%   | 0.00%    |
| 4. can talk about it the improvement initiatives to other parties         | 0.00%    | 3.13%    | 50.00%   | 37.50%   | 9.38%    |
| <b>Overall Average</b>  | 0.00%    | 1.56%    | 35.94%   | 60.16%   | 2.34%    |

**Appendix 6.50 Post Survey – Share Success – Bader School**

| <b>Share success</b>                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. review our work periodically                           | 0.00%    | 0.00%    | 25.00%   | 75.00%   | 0.00%    |
| 2. produce ongoing brochures and students show their work | 0.00%    | 3.13%    | 34.38%   | 59.38%   | 3.13%    |
| 3. scheduled meeting to evaluate the strategic plan       | 0.00%    | 3.13%    | 31.25%   | 65.63%   | 0.00%    |
| <b>Overall Average</b>                                    | 0.00%    | 2.08%    | 30.21%   | 66.67%   | 1.04%    |

***Appendix 6.51 First Cycle Grade – School Examinations Results – Bader School***

Students' average results in the internal final school exams in the core four subjects (First Cycle – grade 1 to 3) – **Bader School**

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i>  | <i>Average</i> |
|----------------------|---------------|----------------|----------------|--------------|----------------|
| <b>2009-2010</b>     | 79.50         | 78.84          | 82.54          | 81.12        | <b>80.5</b>    |
| <b>2010-2011</b>     | 83.20         | 85.58          | 84.44          | 83.79        | <b>84.3</b>    |
| <b>2011-2012</b>     | 85.55         | 88.89          | 86.54          | 86.67        | <b>86.9</b>    |
| <b>2012-2013</b>     | <b>85.92</b>  | <b>88.71</b>   | <b>87.4</b>    | <b>87.68</b> | <b>87.4</b>    |

***Appendix 6.52 Second Cycle Grade – School Examinations Results– Bader School***

Students' average results in the internal final school exams in the core four subjects (Second Cycle – grade 4 to 6) – **Bader School**

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i>  | <i>Average</i> |
|----------------------|---------------|----------------|----------------|--------------|----------------|
| <b>2009-2010</b>     | 76.01         | 73.33          | 88.01          | 77.25        | <b>78.7</b>    |
| <b>2010-2011</b>     | 78.17         | 73.57          | 91.50          | 78.43        | <b>80.4</b>    |
| <b>2011-2012</b>     | 77.81         | 80.09          | 89.44          | 76.36        | <b>80.9</b>    |
| <b>2012-2013</b>     | <b>78.31</b>  | <b>73.11</b>   | <b>87.55</b>   | <b>81.58</b> | <b>80.1</b>    |



**Appendix 6.53 3<sup>rd</sup> Grade National Examinations Performance Scores – Bader School**

**NPS = Normalised Percentage Score**

**PS = Performance Score**

| <b>2009</b>                           |               |             |              |             |
|---------------------------------------|---------------|-------------|--------------|-------------|
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>66</b>     | <b>3.3</b>  | <b>67</b>    | <b>3.6</b>  |
| <b><i>Governorate Performance</i></b> | <b>67</b>     | <b>3.5</b>  | <b>67</b>    | <b>3.6</b>  |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>4.0</b>  | <b>70</b>    | <b>4.0</b>  |
| <b>2010</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>70</b>     | <b>4.05</b> | <b>72</b>    | <b>4.65</b> |
| <b><i>Governorate Performance</i></b> | <b>69</b>     | <b>3.9</b>  | <b>70</b>    | <b>4.45</b> |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>4.05</b> | <b>70</b>    | <b>4.35</b> |
| <b>2011</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>68</b>     | <b>3.4</b>  | <b>71</b>    | <b>3.6</b>  |
| <b><i>Governorate Performance</i></b> | <b>70</b>     | <b>3.7</b>  | <b>71</b>    | <b>3.6</b>  |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>3.7</b>  | <b>70</b>    | <b>3.4</b>  |
| <b>2012</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>74</b>     | <b>3.3</b>  | <b>74</b>    | <b>2.6</b>  |

|                                |               |            |              |            |
|--------------------------------|---------------|------------|--------------|------------|
| <i>Governorate Performance</i> | <b>71</b>     | <b>2.8</b> | <b>70</b>    | <b>2.1</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.7</b> | <b>70</b>    | <b>2.1</b> |
| <b>2013</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>68</b>     | <b>1.6</b> | <b>71</b>    | <b>1.7</b> |
|                                | <b>70</b>     | <b>2.0</b> | <b>71</b>    | <b>1.6</b> |
| <i>Governorate Performance</i> | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
| <b>2014</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>67</b>     | <b>1.1</b> | <b>70</b>    | <b>1.4</b> |
|                                | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |
| <i>Governorate Performance</i> | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |

*Appendix 6.54 6<sup>th</sup> Grade National Examinations Performance Scores – Bader School*

**NPS = Normalised Percentage Score**

**PS = Performance Score**

**2009**

|                                | Arabic   |     | English  |     | Science  |     | Math     |     |
|--------------------------------|----------|-----|----------|-----|----------|-----|----------|-----|
|                                | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School Performance (SP)</i> | 62       | 2.8 | 63       | 3.1 | 63       | 3.3 | 64       | 3.0 |
| <i>Governorate Performance</i> | 64       | 3.2 | 67       | 3.6 | 66       | 3.6 | 66       | 3.3 |
| <i>All SP Mean</i>             | 70       | 4.0 | 70       | 4.0 | 70       | 4.0 | 7.0      | 4.0 |

**2010**

|                                | Arabic   |     | English  |      | Science  |      | Math     |      |
|--------------------------------|----------|-----|----------|------|----------|------|----------|------|
|                                | NPS<br>% | PS  | NPS<br>% | PS   | NPS<br>% | PS   | NPS<br>% | PS   |
| <i>School Performance (SP)</i> | 69       | 3.7 | 66       | 3.6  | 71       | 4.15 | 71       | 4.15 |
| <i>Governorate Performance</i> | 68       | 3.5 | 69       | 3.95 | 70       | 4.05 | 69       | 3.95 |
| <i>All SP Mean</i>             | 70       | 3.9 | 70       | 4.05 | 70       | 4.05 | 70       | 4.05 |

**2011**

|                                | Arabic   |     | English  |     | Science  |     | Math     |     |
|--------------------------------|----------|-----|----------|-----|----------|-----|----------|-----|
|                                | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School Performance (SP)</i> | 69       | 2.3 | 69       | 3.1 | 71       | 3.0 | 73       | 2.9 |
| <i>Governorate Performance</i> | 67       | 2.0 | 68       | 3.0 | 68       | 2.6 | 67       | 2.1 |
| <i>All SP Mean</i>             | 70       | 2.5 | 70       | 3.3 | 70       | 2.9 | 70       | 2.5 |

**2012**

|  | Arabic   |     | English  |     | Science  |     | Math     |     |
|--|----------|-----|----------|-----|----------|-----|----------|-----|
|  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School<br/>Performance<br/>(SP)</i> | 69       | 1.6 | 66       | 1.8 | 69       | 1.8 | 72       | 2.2 |
| <i>Governorate<br/>Performance</i>     | 70       | 1.7 | 69       | 2.3 | 70       | 1.9 | 70       | 1.8 |
| <i>All SP Mean</i>                     | 70       | 1.7 | 70       | 2.5 | 70       | 1.9 | 70       | 1.8 |
| <i>2013</i>                            |          |     |          |     |          |     |          |     |
|  | Arabic   |     | English  |     | Science  |     | Math     |     |
|  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School<br/>Performance<br/>(SP)</i> | 73       | 1.5 | 68       | 0.7 | 72       | 1.6 | 73       | 1.2 |
| <i>Governorate<br/>Performance</i>     | 70       | 1.0 | 69       | 1.1 | 70       | 1.5 | 70       | 0.8 |
| <i>All SP Mean</i>                     | 70       | 1.0 | 70       | 1.3 | 70       | 1.5 | 70       | 0.7 |
| <i>2014</i>                            |          |     |          |     |          |     |          |     |
|  | Arabic   |     | English  |     | Science  |     | Math     |     |
|  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School<br/>Performance<br/>(SP)</i> | 72       | 0.5 | 69       | 0.0 | 72       | 0.5 | 73       | 0.1 |
| <i>Governorate<br/>Performance</i>     | 70       | 0.0 | 69       | 0.0 | 70       | 0.4 | 70       | 0.0 |
| <i>All SP Mean</i>                     | 70       | 0.0 | 70       | 0.0 | 70       | 0.4 | 70       | 0.0 |

**Appendix 6.55 Baseline Survey – Committing to School Improvement – Jassim School**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 0.0%     | 20.0%    | 20.0%    | 48.0%    | 12.0%    |
| 2. know what we want to achieve from the process of the improvement   | 0.0%     | 8.3%     | 29.2%    | 45.8%    | 16.7%    |
| 3. know the reason for undergoing the process of the improvement  | 0.0%     | 8.0%     | 20.0%    | 44.0%    | 28.0%    |
| 4. changed the culture of how people operate together   | 0.0%     | 8.0%     | 20.0%    | 60.0%    | 12.0%    |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 4.0%     | 8.0%     | 24.0%    | 40.0%    | 24.0%    |
| <b>Overall Average</b>  | 0.8%     | 10.5%    | 22.6%    | 47.6%    | 18.5%    |

**Appendix 6.56 Baseline Survey – Diagnosis and Coherence – Jassim School**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 0.0%     | 8.0%     | 24.0%    | 44.0%    | 24.0%    |
| 2. Know the function of the support we get from the Cluster Teams                   | 0.0%     | 8.0%     | 28.0%    | 56.0%    | 8.0%     |
| 3. All actively involved in school planning processes                               | 4.0%     | 16.0%    | 28.0%    | 32.0%    | 20.0%    |
| 4. All assume collective responsibility for individual students and school outcomes | 0.0%     | 4.0%     | 44.0%    | 44.0%    | 8.0%     |
| <b>Overall Average</b>  | 1.0%     | 9.0%     | 31.0%    | 44.0%    | 15.0%    |

**Appendix 6.57 Baseline Survey – High Expectations – Jassim School**

| <b>High Expectations</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 4.0%     | 16.0%    | 32.0%    | 40.0%    | 8.0%     |
| 2. keep our vision alive by reviewing it regularly  | 8.0%     | 4.0%     | 44.0%    | 40.0%    | 4.0%     |
| 3. agreed on strategies for teaching and learning   | 4.0%     | 4.0%     | 32.0%    | 56.0%    | 4.0%     |
| 4. reinforce each other's strengths in our core work  | 8.0%     | 8.0%     | 28.0%    | 52.0%    | 4.0%     |
| <b>Overall Average</b>  | 6.0%     | 8.0%     | 34.0%    | 47.0%    | 5.0%     |

**Appendix 6.58 Baseline Survey – Deep Learning – Jassim School**

| <b>Deep Learning</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| 1. have professional learning communities  | 12.0%    | 12.0%    | 28.0%    | 48.0%    | 0.0%     |
| 2. our professional development is based on student needs and aligned with school goals              | 0.0%     | 8.3%     | 41.7%    | 37.5%    | 12.5%    |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 4.0%     | 8.0%     | 44.0%    | 32.0%    | 12.0%    |
| 4. our professional development is having a positive impact on teacher practice and student learning | 8.0%     | 4.0%     | 20.0%    | 52.0%    | 16.0%    |
| <b>Overall Average</b>   | 6.1%     | 8.1%     | 33.3%    | 42.4%    | 10.1%    |

**Appendix 6.59 Baseline Survey – Change Reaction – Jassim School**

| <b>Change Reaction</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. have developed new ways to work together                               | 12.0%    | 12.0%    | 36.0%    | 36.0%    | 4.0%     |
| 2. share professional practices and refine through feedback mechanisms    | 8.0%     | 8.0%     | 36.0%    | 36.0%    | 12.0%    |
| 3. support the improvement initiatives in our school and can stand for it | 0.0%     | 20.0%    | 16.0%    | 48.0%    | 16.0%    |
| 4. can talk about it the improvement initiatives to other parties         | 4.0%     | 4.0%     | 36.0%    | 40.0%    | 16.0%    |
| <b>Overall Average</b>  | 6.0%     | 11.0%    | 31.0%    | 40.0%    | 12.0%    |

**Appendix 6.60 Baseline Survey – Share Success – Jassim School**

| <b>Share success</b>                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. review our work periodically                           | 4.0%     | 12.0%    | 36.0%    | 40.0%    | 8.0%     |
| 2. produce ongoing brochures and students show their work | 4.0%     | 24.0%    | 28.0%    | 40.0%    | 4.0%     |
| 3. scheduled meeting to evaluate the strategic plan       | 8.0%     | 4.0%     | 48.0%    | 32.0%    | 8.0%     |
| <b>Overall Average</b>                                    | 5.3%     | 13.3%    | 37.3%    | 37.3%    | 6.7%     |

***Appendix 6.61 List of Actions Taken to Improve Jassim School's Performance***

- Start conducting class observation.
- A senior teacher started delivering professional development sessions to teachers' according to their needs.
- The school started preparing the students for National Examinations from the first term.
- Student personal development programme has been started but stopped by the end of term one.
- The issues from the QQA report were addressed in the strategic plan.
- Some teachers were told to be in the class in advanced.
- Senior teachers started supporting their teachers.



*Appendix 6.62 Interviewees Information – Jassim School*

| <i>School Code</i> | <i>Participant Code</i> | <i>Position</i>  | <i>Subject teach</i> | <i>Years in school</i> | <i>Years in MoE</i> | <i>Comments</i>   |
|--------------------|-------------------------|------------------|----------------------|------------------------|---------------------|---|
| <i>JPBS</i>        | JAKA                    | Teacher          | Math                 | 2 years                | 8 years             | -   |
|                    | JHJM                    | Supervisor       | -                    | 9 years                | 14 years            | His son was sick and he traveled outside KoB. He did not participate. |
|                    | JMAJ                    | Senior teacher   | Class teacher        | 3 years                | 14 years            | -   |
|                    | JMAM                    | ICT specialist   | Computer             | 5 years                | 6 years             | He was sick and did not attend the school. Did not participate.       |
|                    | JGNA                    | Social councilor | -                    | 3 years                | 23 years            | -   |
|                    | JASG                    | Principal        | -                    | 3 years                | 28 years            | -   |

**Appendix 6.63 Post Survey – Committing to School Improvement – Jassim School**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 5.9%     | 5.9%     | 41.2%    | 47.1%    | 0.0%     |
| 2. know what we want to achieve from the process of the improvement   | 5.9%     | 5.9%     | 41.2%    | 41.2%    | 5.9%     |
| 3. know the reason for undergoing the process of the improvement  | 5.9%     | 5.9%     | 41.2%    | 47.1%    | 0.0%     |
| 4. changed the culture of how people operate together   | 0.0%     | 17.6%    | 41.2%    | 41.2%    | 0.0%     |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 0.0%     | 23.5%    | 52.9%    | 23.5%    | 0.0%     |
| <b>Overall Average</b>  | 3.5%     | 11.8%    | 43.5%    | 40.0%    | 1.2%     |

**Appendix 6.64 Post Survey – Diagnosis and Coherence – Jassim School**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 5.9%     | 0.0%     | 11.8%    | 82.4%    | 0.0%     |
| 2. Know the function of the support we get from the Cluster Teams                   | 5.9%     | 5.9%     | 41.2%    | 41.2%    | 5.9%     |
| 3. All actively involved in school planning processes                               | 5.9%     | 23.5%    | 11.8%    | 52.9%    | 5.9%     |
| 4. All assume collective responsibility for individual students and school outcomes | 0.0%     | 17.6%    | 23.5%    | 52.9%    | 5.9%     |
| <b>Overall Average</b>  | 4.4%     | 11.8%    | 22.1%    | 57.4%    | 4.4%     |

**Appendix 6.65 Post Survey – High Expectations – Jassim School**

| <b>High Expectations</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 5.9%     | 5.9%     | 47.1%    | 41.2%    | 0.0%     |
| 2. keep our vision alive by reviewing it regularly  | 5.9%     | 11.8%    | 41.2%    | 41.2%    | 0.0%     |
| 3. agreed on strategies for teaching and learning   | 0.0%     | 11.8%    | 47.1%    | 41.2%    | 0.0%     |
| 4. reinforce each other's strengths in our core work  | 0.0%     | 17.6%    | 47.1%    | 29.4%    | 5.9%     |
| <b>Overall Average</b>  | 2.9%     | 11.8%    | 45.6%    | 38.2%    | 1.5%     |

**Appendix 6.66 Post Survey – Deep Learning – Jassim School**

| <b>Deep Learning</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| 1. have professional learning communities  | 5.9%     | 23.5%    | 41.2%    | 29.4%    | 0.0%     |
| 2. our professional development is based on student needs and aligned with school goals              | 5.9%     | 17.6%    | 29.4%    | 41.2%    | 5.9%     |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 5.9%     | 5.9%     | 52.9%    | 29.4%    | 5.9%     |
| 4. our professional development is having a positive impact on teacher practice and student learning | 0.0%     | 11.8%    | 11.8%    | 76.5%    | 0.0%     |
| <b>Overall Average</b>   | 4.4%     | 14.7%    | 33.8%    | 44.1%    | 2.9%     |

**Appendix 6.67 Post Survey – Change Reaction – Jassim School**

| <b><i>Change Reaction</i></b>  | <b><i>1</i></b> | <b><i>2</i></b> | <b><i>3</i></b> | <b><i>4</i></b> | <b><i>5</i></b> |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| <i>1. have developed new ways to work together</i>                               | 0.0%            | 29.4%           | 41.2%           | 29.4%           | 0.0%            |
| <i>2. share professional practices and refine through feedback mechanisms</i>    | 0.0%            | 17.6%           | 41.2%           | 41.2%           | 0.0%            |
| <i>3. support the improvement initiatives in our school and can stand for it</i> | 0.0%            | 5.9%            | 41.2%           | 47.1%           | 5.9%            |
| <i>4. can talk about it the improvement initiatives to other parties</i>         | 0.0%            | 23.5%           | 29.4%           | 41.2%           | 5.9%            |
| <b><i>Overall Average</i></b>  | 0.0%            | 19.1%           | 38.2%           | 39.7%           | 2.9%            |

***Appendix 6.68 Post Survey – Share Success – Jassim School***

| <b><i>Share success</i></b>                                      | <b><i>1</i></b> | <b><i>2</i></b> | <b><i>3</i></b> | <b><i>4</i></b> | <b><i>5</i></b> |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| <i>1. review our work periodically</i>                           | 5.9%            | 11.8%           | 29.4%           | 52.9%           | 0.0%            |
| <i>2. produce ongoing brochures and students show their work</i> | 0.0%            | 23.5%           | 47.1%           | 29.4%           | 0.0%            |
| <i>3. scheduled meeting to evaluate the strategic plan</i>       | 0.0%            | 17.6%           | 35.3%           | 47.1%           | 0.0%            |
| <b><i>Overall Average</i></b>                                    | 2.0%            | 17.6%           | 37.3%           | 43.1%           | 0.0%            |

***Appendix 6.69 First Cycle Grade – School Examinations Results – Jassim School***

Students' average results in the internal final school exams in the core four subjects (First Cycle – grade 1 to 3) – **Jassim School**

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|----------------------|---------------|----------------|----------------|-------------|----------------|
| <b>2009-2010</b>     | 65            | 57.27          | 73.18          | 73.86       | <b>68.23</b>   |
| <b>2010-2011</b>     | 79.5          | 84.9           | 84.2           | 82.6        | <b>82.8</b>    |
| <b>2011-2012</b>     | 81.13         | 90.34          | 83.87          | 81.68       | <b>84.25</b>   |
| <b>2012-2013</b>     | <b>80.9</b>   | <b>88.4</b>    | <b>86.03</b>   | <b>83.9</b> | <b>84.84</b>   |

***Appendix 6.70 Second Cycle Grade – School Examinations Results – Jassim School***

Students' average results in the internal final school exams in the core four subjects (Second Cycle – grade 4 to 6) – **Jassim School**

| <i>Academic year</i> | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|----------------------|---------------|----------------|----------------|-------------|----------------|
| <b>2009-2010</b>     | 76.74         | 68.25          | 81.82          | 68.23       | <b>73.76</b>   |
| <b>2010-2011</b>     | 77.2          | 75             | 82.5           | 72.7        | <b>76.8</b>    |
| <b>2011-2012</b>     | 78.37         | 74.82          | 84.79          | 77.72       | <b>78.93</b>   |
| <b>2012-2013</b>     | <b>71.3</b>   | <b>64.5</b>    | <b>73.6</b>    | <b>72.6</b> | <b>70.5</b>    |

***Appendix 6.71 Third Grade National Examinations Performance Scores – Jassim School***

NPS = Normalised Percentage Score

PS = Performance Score

**2009**

|                                | Arabic    |            | Math      |            |
|--------------------------------|-----------|------------|-----------|------------|
|                                | NPS %     | PS         | NPS %     | PS         |
| <i>School Performance (SP)</i> | <b>62</b> | <b>2.6</b> | <b>61</b> | <b>2.7</b> |
| <i>Governorate Performance</i> | <b>67</b> | <b>3.5</b> | <b>67</b> | <b>3.6</b> |
| <i>All SP Mean</i>             | <b>70</b> | <b>4.0</b> | <b>70</b> | <b>4.0</b> |

**2010**

|                                | Arabic    |             | Math      |             |
|--------------------------------|-----------|-------------|-----------|-------------|
|                                | NPS %     | PS          | NPS %     | PS          |
| <i>School Performance (SP)</i> | <b>67</b> | <b>3.6</b>  | <b>75</b> | <b>5.2</b>  |
| <i>Governorate Performance</i> | <b>69</b> | <b>3.9</b>  | <b>70</b> | <b>4.45</b> |
| <i>All SP Mean</i>             | <b>70</b> | <b>4.05</b> | <b>70</b> | <b>4.35</b> |

**2011**

|                                | Arabic    |            | Math      |            |
|--------------------------------|-----------|------------|-----------|------------|
|                                | NPS %     | PS         | NPS %     | PS         |
| <i>School Performance (SP)</i> | <b>63</b> | <b>2.6</b> | <b>66</b> | <b>2.7</b> |
| <i>Governorate Performance</i> | <b>70</b> | <b>3.7</b> | <b>71</b> | <b>3.6</b> |
| <i>All SP Mean</i>             | <b>70</b> | <b>3.7</b> | <b>70</b> | <b>3.4</b> |

**2012**

|                                | Arabic    |            | Math      |            |
|--------------------------------|-----------|------------|-----------|------------|
|                                | NPS %     | PS         | NPS %     | PS         |
| <i>School Performance (SP)</i> | <b>69</b> | <b>2.5</b> | <b>68</b> | <b>1.8</b> |

|                                |               |            |              |            |
|--------------------------------|---------------|------------|--------------|------------|
| <i>Governorate Performance</i> | <b>71</b>     | <b>2.8</b> | <b>70</b>    | <b>2.1</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.7</b> | <b>70</b>    | <b>2.1</b> |
| <b>2013</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>66</b>     | <b>1.2</b> | <b>64</b>    | <b>0.8</b> |
| <i>Governorate Performance</i> | <b>70</b>     | <b>2.0</b> | <b>71</b>    | <b>1.6</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
| <b>2014</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>65</b>     | <b>0.6</b> | <b>67</b>    | <b>1.0</b> |
| <i>Governorate Performance</i> | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |

**Appendix 6.72 6<sup>th</sup> Grade National Examinations Performance Scores – Jassim School**

**NPS = Normalised Percentage Score**

**PS = Performance Score**

**2009**

|                                | Arabic   |     | English  |     | Science  |     | Math     |     |
|--------------------------------|----------|-----|----------|-----|----------|-----|----------|-----|
|                                | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School Performance (SP)</i> | 62       | 2.8 | 63       | 3.1 | 67       | 3.6 | 66       | 3.3 |
| <i>Governorate Performance</i> | 64       | 3.2 | 67       | 3.6 | 66       | 3.6 | 66       | 3.3 |
| <i>All SP Mean</i>             | 70       | 4.0 | 70       | 4.0 | 70       | 4.0 | 7.0      | 4.0 |

**2010**

|                                | Arabic   |     | English  |      | Science  |      | Math     |      |
|--------------------------------|----------|-----|----------|------|----------|------|----------|------|
|                                | NPS<br>% | PS  | NPS<br>% | PS   | NPS<br>% | PS   | NPS<br>% | PS   |
| <i>School Performance (SP)</i> | 66       | 3.4 | 69       | 3.95 | 69       | 3.95 | 81       | 5.55 |
| <i>Governorate Performance</i> | 68       | 3.5 | 69       | 3.95 | 70       | 4.05 | 69       | 3.95 |
| <i>All SP Mean</i>             | 70       | 3.9 | 70       | 4.05 | 70       | 4.05 | 70       | 4.05 |

**2011**

|                                | Arabic   |     | English  |     | Science  |     | Math     |     |
|--------------------------------|----------|-----|----------|-----|----------|-----|----------|-----|
|                                | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School Performance (SP)</i> | 68       | 2.2 | 65       | 2.6 | 69       | 2.8 | 73       | 3.0 |
| <i>Governorate Performance</i> | 67       | 2.0 | 68       | 3.0 | 68       | 2.6 | 67       | 2.1 |
| <i>All SP Mean</i>             | 70       | 2.5 | 70       | 3.3 | 70       | 2.9 | 70       | 2.5 |

**2012**



|  | Arabic   |     | English  |     | Science  |     | Math     |     |
|--|----------|-----|----------|-----|----------|-----|----------|-----|
|  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School<br/>Performance<br/>(SP)</i> | 64       | 0.5 | 63       | 1.0 | 64       | 1.2 | 68       | 1.6 |
| <i>Governorate<br/>Performance</i>     | 70       | 1.7 | 69       | 2.3 | 70       | 1.9 | 70       | 1.8 |
| <i>All SP Mean</i>                     | 70       | 1.7 | 70       | 2.5 | 70       | 1.9 | 70       | 1.8 |
| <i>2013</i>                            |          |     |          |     |          |     |          |     |
|  | Arabic   |     | English  |     | Science  |     | Math     |     |
|  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School<br/>Performance<br/>(SP)</i> | 64       | 0.0 | 64       | 0.0 | 65       | 1.0 | 68       | 0.4 |
| <i>Governorate<br/>Performance</i>     | 70       | 1.0 | 69       | 0.9 | 70       | 1.5 | 70       | 0.8 |
| <i>All SP Mean</i>                     | 70       | 1.0 | 70       | 1.3 | 70       | 1.5 | 70       | 0.7 |
| <i>2014</i>                            |          |     |          |     |          |     |          |     |
|  | Arabic   |     | English  |     | Science  |     | Math     |     |
|  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  | NPS<br>% | PS  |
| <i>School<br/>Performance<br/>(SP)</i> | 64       | 0.0 | 63       | 0.0 | 64       | 0.0 | 70       | 0.0 |
| <i>Governorate<br/>Performance</i>     | 70       | 0.0 | 69       | 0.0 | 70       | 0.4 | 70       | 0.0 |
| <i>All SP Mean</i>                     | 70       | 0.0 | 70       | 0.0 | 70       | 0.4 | 70       | 0.0 |

**Appendix 6.73 Baseline Survey – Committing to School Improvement – Kameela School**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 2.1%     | 33.3%    | 45.8%    | 18.8%    | 0.0%     |
| 2. know what we want to achieve from the process of the improvement   | 0.0%     | 33.3%    | 33.3%    | 31.3%    | 2.1%     |
| 3. know the reason for undergoing the process of the improvement  | 0.0%     | 6.5%     | 30.4%    | 58.7%    | 4.3%     |
| 4. changed the culture of how people operate together   | 2.1%     | 29.2%    | 47.9%    | 16.7%    | 4.2%     |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 2.1%     | 43.8%    | 31.3%    | 16.7%    | 6.3%     |
| <b>Overall Average</b>  | 1.3%     | 29.4%    | 37.8%    | 28.2%    | 3.4%     |

**Appendix 6.74 Baseline Survey – Diagnosis and Coherence – Kameela School**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 0.0%     | 21.3%    | 12.8%    | 48.9%    | 17.0%    |
| 1. Know the function of the support we get from the Cluster Teams                   | 12.5%    | 37.5%    | 31.3%    | 18.8%    | 0.0%     |
| 2. All actively involved in school planning processes                               | 2.1%     | 16.7%    | 37.5%    | 37.5%    | 6.3%     |
| 3. All assume collective responsibility for individual students and school outcomes | 0.0%     | 21.7%    | 30.4%    | 39.1%    | 8.7%     |
| <b>Overall Average</b>  | 3.7%     | 24.3%    | 28.0%    | 36.0%    | 7.9%     |

**Appendix 6.75 Baseline Survey – High Expectations – Kameela School**

| <b>High Expectations</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. think together about how to align our standards, instruction, assessment, and programs with our vision | 0.0%     | 27.1%    | 41.7%    | 27.1%    | 4.2%     |
| 2. keep our vision alive by reviewing it regularly  | 4.2%     | 37.5%    | 31.3%    | 22.9%    | 4.2%     |
| 3. agreed on strategies for teaching and learning   | 0.0%     | 8.3%     | 31.3%    | 52.1%    | 8.3%     |
| 4. reinforce each other's strengths in our core work  | 6.4%     | 12.8%    | 57.4%    | 21.3%    | 2.1%     |
| <b>Overall Average</b>  | 2.6%     | 21.5%    | 40.3%    | 30.9%    | 4.7%     |

**Appendix 6.76 Baseline Survey – Deep Learning – Kameela School**

| <b>Deep Learning</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| 1. have professional learning communities  | 4.2%     | 22.9%    | 37.5%    | 25.0%    | 10.4%    |
| 2. our professional development is based on student needs and aligned with school goals              | 4.2%     | 25.0%    | 50.0%    | 16.7%    | 4.2%     |
| 3. our professional development focuses on ongoing support rather than one-shot workshops            | 6.3%     | 20.8%    | 50.0%    | 18.8%    | 4.2%     |
| 4. our professional development is having a positive impact on teacher practice and student learning | 4.2%     | 12.5%    | 50.0%    | 22.9%    | 10.4%    |
| <b>Overall Average</b>   | 4.7%     | 20.3%    | 46.9%    | 20.8%    | 7.3%     |

**Appendix 6.77 Baseline Survey – Change Reaction – Kameela School**

| <b>Change Reaction</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. have developed new ways to work together                               | 0.0%     | 29.8%    | 48.9%    | 21.3%    | 0.0%     |
| 2. share professional practices and refine through feedback mechanisms    | 4.2%     | 18.8%    | 47.9%    | 27.1%    | 2.1%     |
| 3. support the improvement initiatives in our school and can stand for it | 0.0%     | 10.4%    | 47.9%    | 33.3%    | 8.3%     |
| 4. can talk about it the improvement initiatives to other parties         | 0.0%     | 18.8%    | 54.2%    | 20.8%    | 6.3%     |
| <b>Overall Average</b>  | 1.0%     | 19.4%    | 49.7%    | 25.7%    | 4.2%     |

**Appendix 6.78 Baseline Survey – Share Success – Kameela School**

| <b>Share success</b>                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. review our work periodically                           | 0.0%     | 16.7%    | 16.7%    | 60.4%    | 6.3%     |
| 2. produce ongoing brochures and students show their work | 6.3%     | 33.3%    | 39.6%    | 14.6%    | 6.3%     |
| 3. scheduled meeting to evaluate the strategic plan       | 6.4%     | 25.5%    | 8.5%     | 51.1%    | 8.5%     |
| <b>Overall Average</b>                                    | 4.2%     | 25.2%    | 21.7%    | 42.0%    | 7.0%     |

***Appendix 6.79 List of Actions Taken to Improve Kameela School's Performance***

- Started reviewing the vision and putting actions toward achieving it.
- Learning walk was started. Cluster Team supported the senior teachers to conduct class observation and support the teachers.
- Senior teacher started scrutinizing students' work.
- The SIT members started mapping the findings from the QQA report and the things they are going to do.
- School started a programme for parents. Every Saturday parents go to the school to do a voluntary task.
- Established professional learning communities.
- A senior teacher provided professional development sessions in teaching and learning strategies.
- Middle leadership participated in supporting other schools.
- An introduction session was given to all teachers about the SIP by the Cluster Team chief.
- MoE supported the school in students' behaviour.

*Appendix 6.80 Interviewees Information – Kameela School*

| <i>School Code</i> | <i>Participant Code</i> | <i>Position</i>     | <i>Subject teach</i> | <i>Years in school</i> | <i>Years in MoE</i> | <i>Comments</i>  |
|--------------------|-------------------------|---------------------|----------------------|------------------------|---------------------|--|
| <i>HPGS</i>        | HFAH                    | Senior teacher      | Class teacher        | 10 years               | 16 years            | -  |
|                    | HLARI                   | Principal assistant | -                    | 3 years                | 20 years            | Participated in only one interview. Then she started studying in the university. |
|                    | HLAMI                   | Senior teacher      | Arabic               | 10 years               | 21 years            | -  |
|                    | HFAN                    | Social councilor    | -                    | 2 years                | 2 years             | Left the school  |

**Appendix 6.81 Post Survey – Committing to School Improvement – Kameela School**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 2.7%     | 37.8%    | 21.6%    | 32.4%    | 5.4%     |
| 2. know what we want to achieve from the process of the improvement   | 0.0%     | 21.6%    | 29.7%    | 29.7%    | 18.9%    |
| 3. know the reason for undergoing the process of the improvement  | 0.0%     | 13.5%    | 35.1%    | 27.0%    | 24.3%    |
| 4. changed the culture of how people operate together   | 0.0%     | 0.0%     | 27.8%    | 55.6%    | 16.7%    |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 5.4%     | 8.1%     | 32.4%    | 29.7%    | 24.3%    |
| <b>Overall Average</b>  | 1.6%     | 16.3%    | 29.3%    | 34.8%    | 17.9%    |

**Appendix 6.82 Post Survey – Diagnosis and Coherence – Kameela School**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 0.0%     | 5.4%     | 10.8%    | 45.9%    | 37.8%    |
| 2. Know the function of the support we get from the Cluster Teams                   | 5.4%     | 5.4%     | 37.8%    | 35.1%    | 16.2%    |
| 3. All actively involved in school planning processes                               | 0.0%     | 8.1%     | 24.3%    | 51.4%    | 16.2%    |
| 4. All assume collective responsibility for individual students and school outcomes | 10.8%    | 0.0%     | 21.6%    | 54.1%    | 13.5%    |
| <b>Overall Average</b>  | 4.1%     | 4.7%     | 23.6%    | 46.6%    | 20.9%    |

**Appendix 6.83 Post Survey – High Expectations – Kameela School**

| <b>High Expectations</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| <i>1. think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 0.0%     | 2.7%     | 51.4%    | 29.7%    | 16.2%    |
| <i>2. keep our vision alive by reviewing it regularly</i>  | 0.0%     | 13.5%    | 29.7%    | 45.9%    | 10.8%    |
| <i>3. agreed on strategies for teaching and learning</i>   | 0.0%     | 2.7%     | 10.8%    | 62.2%    | 24.3%    |
| <i>4. reinforce each other's strengths in our core work</i>  | 0.0%     | 5.4%     | 10.8%    | 51.4%    | 32.4%    |
| <b>Overall Average</b>   | 0.0%     | 6.1%     | 25.7%    | 47.3%    | 20.9%    |

**Appendix 6.84 Post Survey – Deep Learning – Kameela School**

| <b>Deep Learning</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| <i>1. have professional learning communities</i>  | 0.0%     | 14.3%    | 20.0%    | 54.3%    | 11.4%    |
| <i>2. our professional development is based on student needs and aligned with school goals</i>              | 0.0%     | 13.5%    | 8.1%     | 64.9%    | 13.5%    |
| <i>3. our professional development focuses on ongoing support rather than one-shot workshops</i>            | 0.0%     | 18.9%    | 32.4%    | 40.5%    | 8.1%     |
| <i>4. our professional development is having a positive impact on teacher practice and student learning</i> | 0.0%     | 2.7%     | 18.9%    | 45.9%    | 32.4%    |
| <b>Overall Average</b>  | 0.0%     | 12.3%    | 19.9%    | 51.4%    | 16.4%    |

**Appendix 6.85 Post Survey – Change Reaction – Kameela School**



| <i><b>Change Reaction</b></i>   | <i><b>1</b></i> | <i><b>2</b></i> | <i><b>3</b></i> | <i><b>4</b></i> | <i><b>5</b></i> |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1. have developed new ways to work together                               | 10.8%           | 10.8%           | 16.2%           | 43.2%           | 18.9%           |
| 2. share professional practices and refine through feedback mechanisms    | 0.0%            | 16.7%           | 25.0%           | 44.4%           | 13.9%           |
| 3. support the improvement initiatives in our school and can stand for it | 0.0%            | 2.8%            | 11.1%           | 55.6%           | 30.6%           |
| 4. can talk about it the improvement initiatives to other parties         | 0.0%            | 2.8%            | 30.6%           | 38.9%           | 27.8%           |
| <b>Overall Average</b>  | 2.8%            | 8.3%            | 20.7%           | 45.5%           | 22.8%           |

***Appendix 6.86 Post Survey – Share Success – Kameela School***

| <i><b>Share success</b></i>                               | <i><b>1</b></i> | <i><b>2</b></i> | <i><b>3</b></i> | <i><b>4</b></i> | <i><b>5</b></i> |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1. review our work periodically                           | 0.0%            | 2.7%            | 18.9%           | 59.5%           | 18.9%           |
| 2. produce ongoing brochures and students show their work | 0.0%            | 10.8%           | 18.9%           | 54.1%           | 16.2%           |
| 3. scheduled meeting to evaluate the strategic plan       | 2.7%            | 5.4%            | 24.3%           | 54.1%           | 13.5%           |
| <b>Overall Average</b>                                    | 0.9%            | 6.3%            | 20.7%           | 55.9%           | 16.2%           |

***Appendix 6.87 First Cycle Grade – School Examinations Results – Kameela School***

Students' average results in the internal final school exams in the core four subjects (First Cycle – grade 1 to 3) – **Kameela School**

| <i>Academic year</i>    | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|-------------------------|---------------|----------------|----------------|-------------|----------------|
| <b><i>2009-2010</i></b> | 81.26         | 86.66          | 84.02          | 86.98       | <b>84.73</b>   |
| <b><i>2010-2011</i></b> | 86.32         | 85.55          | 87.83          | 88.68       | <b>87.09</b>   |
| <b><i>2011-2012</i></b> | 85.83         | 89.73          | 88.54          | 88.96       | <b>88.26</b>   |
| <b><i>2012-2013</i></b> | 84.41         | 88.88          | 87.71          | 88.71       | <b>87.43</b>   |

***Appendix 6.88 Second Cycle Grade – School Examinations Results – Kameela School***

Students' average results in the internal final school exams in the core four subjects (Second Cycle – grade 4 to 6) – **Kameela School**

| <i>Academic year</i>    | <i>Arabic</i> | <i>English</i> | <i>Science</i> | <i>Math</i> | <i>Average</i> |
|-------------------------|---------------|----------------|----------------|-------------|----------------|
| <b><i>2009-2010</i></b> | 78.26         | 77.59          | 81.29          | 74.03       | <b>77.79</b>   |
| <b><i>2010-2011</i></b> | 75.1          | 75.17          | 78.89          | 67.8        | <b>74.24</b>   |
| <b><i>2011-2012</i></b> | 82.82         | 85.17          | 72.7           | 75.35       | <b>79.1</b>    |
| <b><i>2012-2013</i></b> | 79.4          | 73.25          | 72.51          | 77.35       | <b>75.63</b>   |

**Appendix 6.89 3<sup>rd</sup> Grade National Examinations Performance Scores – Kameela School**

**NPS = Normalised Percentage Score**

**PS = Performance Score**

| <b>2009</b>                           |               |             |              |             |
|---------------------------------------|---------------|-------------|--------------|-------------|
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>64</b>     | <b>3.0</b>  | <b>63</b>    | <b>3.0</b>  |
| <b><i>Governorate Performance</i></b> | <b>72</b>     | <b>4.3</b>  | <b>69</b>    | <b>3.9</b>  |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>4.0</b>  | <b>70</b>    | <b>4.0</b>  |
| <b>2010</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>70</b>     | <b>4.05</b> | <b>68</b>    | <b>4.0</b>  |
| <b><i>Governorate Performance</i></b> | <b>72</b>     | <b>4.35</b> | <b>71</b>    | <b>4.55</b> |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>4.05</b> | <b>70</b>    | <b>4.35</b> |
| <b>2011</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>68</b>     | <b>3.4</b>  | <b>67</b>    | <b>3.0</b>  |
| <b><i>Governorate Performance</i></b> | <b>71</b>     | <b>3.9</b>  | <b>70</b>    | <b>3.3</b>  |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>3.7</b>  | <b>70</b>    | <b>3.4</b>  |
| <b>2012</b>                           |               |             |              |             |
|                                       | <b>Arabic</b> |             | <b>Math</b>  |             |
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>69</b>     | <b>2.5</b>  | <b>67</b>    | <b>1.6</b>  |

|                                |               |            |              |            |
|--------------------------------|---------------|------------|--------------|------------|
| <i>Governorate Performance</i> | <b>70</b>     | <b>2.7</b> | <b>69</b>    | <b>1.9</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.7</b> | <b>70</b>    | <b>2.1</b> |
| <b>2013</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
|                                | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
|                                | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>2.0</b> | <b>70</b>    | <b>1.5</b> |
| <b>2014</b>                    |               |            |              |            |
| <i>School Performance (SP)</i> | <b>Arabic</b> |            | <b>Math</b>  |            |
|                                | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
|                                | <b>73</b>     | <b>2.2</b> | <b>70</b>    | <b>1.5</b> |
|                                | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |
|                                | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |
| <i>All SP Mean</i>             | <b>70</b>     | <b>1.7</b> | <b>70</b>    | <b>1.4</b> |

**Appendix 6.90 6<sup>th</sup> Grade National Examinations Performance Scores – Kameela School**

**NPS = Normalised Percentage Score**

**PS = Performance Score**

**2009**

|                                       | <b>Arabic</b> |            | <b>English</b> |            | <b>Science</b> |            | <b>Math</b>  |            |
|---------------------------------------|---------------|------------|----------------|------------|----------------|------------|--------------|------------|
|                                       | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b>   | <b>PS</b>  | <b>NPS %</b>   | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
| <b><i>School Performance (SP)</i></b> | <b>70</b>     | <b>4.0</b> | <b>73</b>      | <b>4.3</b> | <b>67</b>      | <b>3.7</b> | <b>67</b>    | <b>3.4</b> |
| <b><i>Governorate Performance</i></b> | <b>74</b>     | <b>4.6</b> | <b>72</b>      | <b>4.2</b> | <b>71</b>      | <b>4.1</b> | <b>73</b>    | <b>4.4</b> |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>4.0</b> | <b>70</b>      | <b>4.0</b> | <b>70</b>      | <b>4.0</b> | <b>7.0</b>   | <b>4.0</b> |

**2010**

|                                       | <b>Arabic</b> |             | <b>English</b> |             | <b>Science</b> |             | <b>Math</b>  |             |
|---------------------------------------|---------------|-------------|----------------|-------------|----------------|-------------|--------------|-------------|
|                                       | <b>NPS %</b>  | <b>PS</b>   | <b>NPS %</b>   | <b>PS</b>   | <b>NPS %</b>   | <b>PS</b>   | <b>NPS %</b> | <b>PS</b>   |
| <b><i>School Performance (SP)</i></b> | <b>73</b>     | <b>4.25</b> | <b>75</b>      | <b>4.65</b> | <b>73</b>      | <b>4.4</b>  | <b>72</b>    | <b>4.4</b>  |
| <b><i>Governorate Performance</i></b> | <b>75</b>     | <b>4.5</b>  | <b>73</b>      | <b>4.45</b> | <b>72</b>      | <b>4.3</b>  | <b>72</b>    | <b>4.4</b>  |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>3.9</b>  | <b>70</b>      | <b>4.05</b> | <b>70</b>      | <b>4.05</b> | <b>70</b>    | <b>4.05</b> |

**2011**

|                                       | <b>Arabic</b> |            | <b>English</b> |            | <b>Science</b> |            | <b>Math</b>  |            |
|---------------------------------------|---------------|------------|----------------|------------|----------------|------------|--------------|------------|
|                                       | <b>NPS %</b>  | <b>PS</b>  | <b>NPS %</b>   | <b>PS</b>  | <b>NPS %</b>   | <b>PS</b>  | <b>NPS %</b> | <b>PS</b>  |
| <b><i>School Performance (SP)</i></b> | <b>75</b>     | <b>3.2</b> | <b>72</b>      | <b>3.5</b> | <b>72</b>      | <b>3.1</b> | <b>70</b>    | <b>2.4</b> |
| <b><i>Governorate Performance</i></b> | <b>75</b>     | <b>3.2</b> | <b>73</b>      | <b>3.6</b> | <b>73</b>      | <b>3.2</b> | <b>73</b>    | <b>2.9</b> |
| <b><i>All SP Mean</i></b>             | <b>70</b>     | <b>2.5</b> | <b>70</b>      | <b>3.3</b> | <b>70</b>      | <b>2.9</b> | <b>70</b>    | <b>2.5</b> |

| <i>2012</i>                            |                  |            |                  |            |                  |            |                  |            |
|--|------------------|------------|------------------|------------|------------------|------------|------------------|------------|
|  | <b>Arabic</b>    |            | <b>English</b>   |            | <b>Science</b>   |            | <b>Math</b>      |            |
|  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  |
| <i>School<br/>Performance<br/>(SP)</i> | <b>73</b>        | <b>2.3</b> | <b>71</b>        | <b>2.8</b> | <b>73</b>        | <b>2.2</b> | <b>70</b>        | <b>1.8</b> |
| <i>Governorate<br/>Performance</i>     | <b>70</b>        | <b>1.9</b> | <b>71</b>        | <b>2.6</b> | <b>70</b>        | <b>1.9</b> | <b>70</b>        | <b>1.8</b> |
| <i>All SP Mean</i>                     | <b>70</b>        | <b>1.7</b> | <b>70</b>        | <b>2.5</b> | <b>70</b>        | <b>1.9</b> | <b>70</b>        | <b>1.8</b> |
| <i>2013</i>                            |                  |            |                  |            |                  |            |                  |            |
|  | <b>Arabic</b>    |            | <b>English</b>   |            | <b>Science</b>   |            | <b>Math</b>      |            |
|  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  |
| <i>School<br/>Performance<br/>(SP)</i> | <b>74</b>        | <b>1.7</b> | <b>76</b>        | <b>2.4</b> | <b>70</b>        | <b>1.5</b> | <b>70</b>        | <b>0.7</b> |
| <i>Governorate<br/>Performance</i>     | <b>70</b>        | <b>1.0</b> | <b>69</b>        | <b>1.1</b> | <b>69</b>        | <b>1.4</b> | <b>70</b>        | <b>0.7</b> |
| <i>All SP Mean</i>                     | <b>70</b>        | <b>1.0</b> | <b>70</b>        | <b>1.3</b> | <b>70</b>        | <b>1.5</b> | <b>70</b>        | <b>0.7</b> |
| <i>2014</i>                            |                  |            |                  |            |                  |            |                  |            |
|  | <b>Arabic</b>    |            | <b>English</b>   |            | <b>Science</b>   |            | <b>Math</b>      |            |
|  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  | <b>NPS<br/>%</b> | <b>PS</b>  |
| <i>School<br/>Performance<br/>(SP)</i> | <b>75</b>        | <b>1.1</b> | <b>72</b>        | <b>0.2</b> | <b>70</b>        | <b>0.4</b> | <b>67</b>        | <b>0.0</b> |
| <i>Governorate<br/>Performance</i>     | <b>70</b>        | <b>0.0</b> | <b>69</b>        | <b>0.0</b> | <b>69</b>        | <b>0.3</b> | <b>70</b>        | <b>0.0</b> |
| <i>All SP Mean</i>                     | <b>70</b>        | <b>0.0</b> | <b>70</b>        | <b>0.0</b> | <b>70</b>        | <b>0.4</b> | <b>70</b>        | <b>0.0</b> |

**Appendix 6.91 Baseline Survey – Committing to School Improvement**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 2.1%     | 24.3%    | 33.3%    | 36.8%    | 3.5%     |
| 2. know what we want to achieve from the process of the improvement   | 2.1%     | 17.5%    | 35.7%    | 37.1%    | 7.7%     |
| 3. know the reason for undergoing the process of the improvement  | 3.5%     | 4.3%     | 29.1%    | 51.8%    | 11.3%    |
| 4. changed the culture of how people operate together   | 2.8%     | 16.7%    | 31.9%    | 38.9%    | 9.7%     |
| 5. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 2.8%     | 22.2%    | 34.0%    | 27.8%    | 13.2%    |
| <b>Overall Average</b>  | 2.7%     | 17.0%    | 32.8%    | 38.4%    | 9.1%     |

**Appendix 6.92 Baseline Survey – Diagnosis and Coherence**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 0.7%     | 11.9%    | 22.4%    | 49.0%    | 16.1%    |
| 2. Know the function of the support we get from the Cluster Teams                   | 6.3%     | 21.5%    | 28.5%    | 36.8%    | 6.9%     |
| 3. All actively involved in school planning processes                               | 2.1%     | 16.0%    | 32.6%    | 36.8%    | 12.5%    |
| 4. All assume collective responsibility for individual students and school outcomes | 2.1%     | 8.5%     | 33.1%    | 48.6%    | 7.7%     |
| <b>Overall Average</b>  | 2.8%     | 14.5%    | 29.1%    | 42.8%    | 10.8%    |

**Appendix 6.93 Baseline Survey – High Expectations**

| <b>High Expectations</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| <i>1. think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 2.8%     | 20.3%    | 37.1%    | 33.6%    | 6.3%     |
| <i>2. keep our vision alive by reviewing it regularly</i>  | 3.5%     | 19.6%    | 35.7%    | 32.9%    | 8.4%     |
| <i>3. agreed on strategies for teaching and learning</i>   | 1.4%     | 8.3%     | 31.3%    | 46.5%    | 12.5%    |
| <i>4. reinforce each other's strengths in our core work</i>  | 4.9%     | 9.8%     | 39.2%    | 35.0%    | 11.2%    |
| <b>Overall Average</b>   | 3.1%     | 14.5%    | 35.8%    | 37.0%    | 9.6%     |

**Appendix 6.94 Baseline Survey – Deep Learning**

| <b>Deep Learning</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| <i>1. have professional learning communities</i>  | 5.6%     | 15.3%    | 32.6%    | 38.2%    | 8.3%     |
| <i>2. our professional development is based on student needs and aligned with school goals</i>              | 3.5%     | 16.1%    | 46.2%    | 27.3%    | 7.0%     |
| <i>3. our professional development focuses on ongoing support rather than one-shot workshops</i>            | 6.3%     | 13.9%    | 42.4%    | 27.8%    | 9.7%     |
| <i>4. our professional development is having a positive impact on teacher practice and student learning</i> | 4.2%     | 9.7%     | 36.8%    | 39.6%    | 9.7%     |
| <b>Overall Average</b>  | 4.9%     | 13.7%    | 39.5%    | 33.2%    | 8.7%     |



**Appendix 6.95 Baseline Survey – Change Reaction**

| <b>Change Reaction</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| <i>1. have developed new ways to work together</i>                               | 2.8%     | 16.9%    | 42.3%    | 33.8%    | 4.2%     |
| <i>2. share professional practices and refine through feedback mechanisms</i>    | 3.5%     | 13.3%    | 39.2%    | 34.3%    | 9.8%     |
| <i>3. support the improvement initiatives in our school and can stand for it</i> | 0.7%     | 9.1%     | 33.6%    | 44.1%    | 12.6%    |
| <i>4. can talk about it the improvement initiatives to other parties</i>         | 1.4%     | 10.5%    | 42.7%    | 33.6%    | 11.9%    |
| <b>Overall Average</b>   | 2.1%     | 12.4%    | 39.4%    | 36.4%    | 9.6%     |

**Appendix 6.96 Baseline Survey – Share Success**

| <b>Share Success</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| <i>1. review our work periodically</i>                           | 1.4%     | 11.9%    | 26.6%    | 49.7%    | 10.5%    |
| <i>2. produce ongoing brochures and students show their work</i> | 4.2%     | 19.7%    | 36.6%    | 31.0%    | 8.5%     |
| <i>3. scheduled meeting to evaluate the strategic plan</i>       | 5.0%     | 17.1%    | 27.1%    | 41.4%    | 9.3%     |
| <b>Overall Average</b>   | 2.7%     | 14.1%    | 35.4%    | 38.3%    | 9.5%     |

**Appendix 6.97 Interviewees Information**

| ITEM  | NUMBER | PERCENTAGE (%) |
|---|--------|----------------|
| <b><i>GENDER</i></b>                                |        |                |
| <b><i>MALE</i></b>                                  | 15     | 54             |
| <b><i>FEMALE</i></b>                                | 13     | 46             |
| <b><i>ROLE</i></b>                                  |        |                |
| <b><i>TEACHER</i></b>                               | 5      | 18             |
| <b><i>SENIOR TEACHER</i></b>                        | 11     | 39             |
| <b><i>PRINCIPAL ASSISTANT</i></b>                   | 2      | 7              |
| <b><i>PRINCIPAL</i></b>                             | 3      | 11             |
| <b><i>SOCIAL COUNCILOR</i></b>                      | 4      | 14             |
| <b><i>OTHER</i></b>                                 | 3      | 11             |
| <b><i>YEARS OF EXPERIENCE</i></b>                   |        |                |
| <b><i>&lt;5</i></b>                                 | 2      | 7              |
| <b><i>5 – 10</i></b>                                | 5      | 18             |
| <b><i>11 – 20</i></b>                               | 14     | 50             |
| <b><i>&gt; 20</i></b>                               | 7      | 25             |
| <b><i>NUMBER OF YEARS WORKING IN THE SCHOOL</i></b> |        |                |
| <b><i>&lt;5</i></b>                                 | 18     | 64             |
| <b><i>5 – 10</i></b>                                | 8      | 29             |
| <b><i>11 – 20</i></b>                               | 2      | 7              |
| <b><i>&gt; 20</i></b>                               | 0      | 0              |

**Appendix 6.98 Post Survey – Committing to School Improvement**

| <b>Committing to School Improvement</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. believe the improvement effort will enhance current practice   | 2.6%     | 15.4%    | 24.8%    | 52.1%    | 5.1%     |
| 2. know what we want to achieve from the process of the improvement   | 1.7%     | 11.9%    | 27.1%    | 44.1%    | 15.3%    |
| 2. know the reason for undergoing the process of the improvement  | 2.5%     | 6.8%     | 29.7%    | 42.4%    | 18.6%    |
| 3. changed the culture of how people operate together   | 0.9%     | 6.0%     | 36.2%    | 47.4%    | 9.5%     |
| 4. teachers are quite familiar with and can accurately explain the improvement projects for their classroom and for the school. | 2.6%     | 9.4%     | 41.9%    | 30.8%    | 15.4%    |
| <b>Overall Average</b>  | 2.0%     | 9.9%     | 31.9%    | 43.3%    | 12.8%    |

**Appendix 6.99 Post Survey – Diagnosis and Coherence**

| <b>Diagnosis and Coherence</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. Share and understand the school vision   | 2.5%     | 4.2%     | 10.8%    | 58.3%    | 24.2%    |
| 2. Know the function of the support we get from the Cluster Teams                   | 5.0%     | 5.0%     | 25.8%    | 50.0%    | 14.2%    |
| 3. All actively involved in school planning processes                               | 1.7%     | 7.5%     | 25.8%    | 42.5%    | 22.5%    |
| 4. All assume collective responsibility for individual students and school outcomes | 4.2%     | 5.8%     | 15.0%    | 65.8%    | 9.2%     |
| <b>Overall Average</b>  | 3.3%     | 5.6%     | 19.4%    | 54.2%    | 17.5%    |

**Appendix 6.100 Post Survey – High Expectations**

| <b>High Expectations</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|--|----------|----------|----------|----------|----------|
| <i>1. think together about how to align our standards, instruction, assessment, and programs with our vision</i> | 2.5%     | 5.0%     | 41.7%    | 45.0%    | 5.8%     |
| <i>2. keep our vision alive by reviewing it regularly</i>  | 1.7%     | 6.7%     | 30.0%    | 47.5%    | 14.2%    |
| <i>3. agreed on strategies for teaching and learning</i>   | 1.7%     | 5.0%     | 16.7%    | 63.3%    | 13.3%    |
| <i>4. reinforce each other's strengths in our core work</i>  | 2.5%     | 5.8%     | 19.2%    | 57.5%    | 15.0%    |
| <b>Overall Average</b>   | 2.1%     | 5.6%     | 26.9%    | 53.3%    | 12.1%    |

**Appendix 6.101 Post Survey – Deep Learning**

| <b>Deep Learning</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| <i>1. have professional learning communities</i>  | 1.7%     | 11.9%    | 28.0%    | 43.2%    | 15.3%    |
| <i>2. our professional development is based on student needs and aligned with school goals</i>              | 3.3%     | 8.3%     | 20.0%    | 50.8%    | 17.5%    |
| <i>3. our professional development focuses on ongoing support rather than one-shot workshops</i>            | 2.5%     | 8.3%     | 34.2%    | 47.5%    | 7.5%     |
| <i>4. our professional development is having a positive impact on teacher practice and student learning</i> | 1.7%     | 4.2%     | 16.7%    | 56.7%    | 20.8%    |
| <b>Overall Average</b>  | 2.3%     | 8.2%     | 24.7%    | 49.6%    | 15.3%    |

**Appendix 6.102 Post Survey – Change Reaction**

| <b>Change Reaction</b>  | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. have developed new ways to work together                               | 5.0%     | 9.2%     | 30.8%    | 41.7%    | 13.3%    |
| 2. share professional practices and refine through feedback mechanisms    | 1.7%     | 10.1%    | 24.4%    | 51.3%    | 12.6%    |
| 3. support the improvement initiatives in our school and can stand for it | 0.8%     | 4.2%     | 16.8%    | 55.5%    | 22.7%    |
| 4. can talk about it the improvement initiatives to other parties         | 0.8%     | 6.7%     | 27.7%    | 42.0%    | 22.7%    |
| <b>Overall Average</b>  | 2.1%     | 7.5%     | 24.9%    | 47.6%    | 17.8%    |

**Appendix 6.103 Post Survey – Share Success**

| <b>Share Success</b>                                      | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|---|----------|----------|----------|----------|----------|
| 1. review our work periodically                           | 2.5%     | 4.2%     | 10.8%    | 58.3%    | 24.2%    |
| 2. produce ongoing brochures and students show their work | 5.0%     | 5.0%     | 25.8%    | 50.0%    | 14.2%    |
| 3. scheduled meeting to evaluate the strategic plan       | 1.7%     | 7.5%     | 25.8%    | 42.5%    | 22.5%    |
| <b>Overall Average</b>                                    | 4.2%     | 5.8%     | 15.0%    | 65.8%    | 9.2%     |